Exhibit 4

UNITED STATES PATENT AND TRADEMARK OFF	ICE
BEFORE THE PATENT TRIAL AND APPEAL BOA	RD

DELTA AIR LINES, INC., FRONTIER AIRLINES, INC., UNITED AIRLINES, INC., US AIRWAYS, INC., AND AMERICAN AIRLINES, INC.

Petitioners

v.

LOYALTY CONVERSION SYSTEMS CORPORATION Patent Owner

Case CBM: CBM2014-00095 Patent 8,313,023 April 3, 2014

CORRECTED PETITION FOR COVERED BUSINESS METHOD PATENT REVIEW OF U.S. PATENT NO. 8,313,023 UNDER 35 U.S.C. § 321 AND § 18 OF THE LEAHY-SMITH AMERICA INVENTS ACT

Before GRACE MEDLEY, Administrative Patent Judge

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U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

TABLE OF CONTENTS

		1	Page
I.		RODUCTION AND STATEMENT OF RELIEF REQUESTED C.F.R. § 42.22(a))	1
II.	PRE	ELIMINARY STATEMENT	1
III.		NDATORY NOTICES INTRODUCTION AND STATEMENT RELIEF REQUESTED (37 C.F.R. § 42.22(a))	5
	A.	Real Party-In-Interest	5
	B.	Related Matters	5
	C.	Lead and Back-Up Counsel and Service Information	6
IV.		ERVIEW OF THE '023 PATENT AND ITS PROSECUTION TORY	7
	A.	Specification	7
	B.	Prosecution History	10
V.	GRO	OUNDS FOR STANDING	13
	A.	At Least One Challenged Claim Is Unpatentable	13
	B.	The '023 Patent is A Covered Business Method Patent	13
	C.	Claims 31-34, 36-42, and 44-46 Are Not Directed to A "Technological Invention"	16
VI.		ATEMENT OF PRECISE RELIEF REQUESTED FOR EACH	19
	A.	Claims for which Review is Requested	19
	B.	Statutory Grounds of Challenge	
	C.	Priority Date for Claims 31-34, 36-42, and 44-46 of the '023	
		Patent	20
	D.	Claim Construction	21
		1. Broadest Reasonable Interpretation	21
		2. "entity"	22
		3. "commerce partner"	
		4. "non-negotiable credits"	24
		5. "entity independent funds"	24

		6.	"loyalty points"	25
	E.		oners Have Been Sued For Infringement of the '023 Patent Are Not Estopped	26
VII.			31-34, 36-42, AND 44-46 OF THE '023 PATENT ARE TABLE	26
	A.		nd No. 1: Claims 31-34, 36-42, and 44-46 are Invalider 35 U.S.C. § 101	26
		1.	The '023 Patent Claims Are Unpatentably Abstract	27
		2.	The '023 Patent Claims Do Not Satisfy the Machine-or- Transformation Test	32
	B.	Unde	nd No. 2: Claims 31-34, 36-42, and 44-46 are Invalid er 35 U.S.C. § 102(b) as Being Anticipated by <i>MacLean et</i>	35
		1.	Maclean Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein the Non-negotiable Credits and Entity Independent Funds Are Loyalty Points of Different Rewards Programs	36
		2.	MacLean Discloses Converting Non-negotiable Credits to Entity Independent Funds Based On Credits-To-Fund Ratio	37
		3.	MacLean Discloses a Commerce Partner That Does Not Accept Non-negotiable Credits Prior to Conversion, And Accepts The Entity Independent Funds to Provide Goods And Services After The Conversion	38
		4.	MacLean Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein The Commerce Partner is Compensated for Providing The Entity Independent Funds to The Consumer	39
		5.	Claim Chart for Claims 31-34, 36-42, And 44-46 And MacLean	39
	C.	Unde	nd No. 3: Claims 31-34, 36-42, and 44-46 Are Invalid er 35 U.S.C. § 102(b) as Being Anticipated By <i>Antonucci et</i>	53
		1.	Antonucci Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein the Non-negotiable	

		Credits And Entity Independent Funds Are Loyalty Points of Different Rewards Programs	54
	2.	Antonucci Discloses Converting Non-negotiable Credits to Entity Independent Funds Based on Credits-To-Fund Ratio	55
	3.	Antonucci Discloses a Commerce Partner That Does Not Accept Non-negotiable Credits Prior to Conversion, And Accepts The Entity Independent Funds to Provide Goods And Services After The Conversion	55
	4.	Antonucci Inherently Discloses Converting Non- negotiable Credits to Entity Independent Funds, Wherein The Commerce Partner is Compensated for Providing The Entity Independent Funds to the Consumer	56
	5.	Claim Chart For Claims 31-34, 36-42, And 44-46 And Antonucci	58
D.	Unde	and No. 4: Claims 31-34, 36-42, And 44-46 Are Invalid er 35 U.S.C. § 103 as Being Obvious Over <i>Antonucci et al.</i> iew of <i>MacLean et al.</i>	68
E.	Unde	and No. 5: Claims 31-34, 36-42, and 44-46 Are Invalid er 35 U.S.C. §112(a), (Known as 112, First Paragraph Prior IA)	70
	1.	The '023 Patent Specification Fails to Describe Converting Non-Negotiable Credits Into Entity Independent Funds "Wherein the Entity Independent Funds are Loyalty Points of a Loyalty Program of the Commerce Partner".	71
	2.	The '023 Patent Specification Fails to Describe "Wherein the Commerce Partner is Compensated For Providing the Entity Independent Funds"	74
	3.	The Abstract of the '023 Patent Does Not Provide Sufficient Written Description For Converting Non-Negotiable Credits Into Entity Independent Funds "Wherein the Entity Independent Funds are Loyalty Points of a Loyalty Program of the Commerce Partner" and "Wherein the Commerce Partner is Compensated For Providing the Entity Independent Funds"	74

Case 2:13-cy-00655-WCB	Document 63-5	Filed 04/07/14	Page 6 of 92 PageID #: 7	'1 <i>6</i>

VIII. CONCLUSION......77

TABLE OF AUTHORITIES

Page(s) Cases
CASES
Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336 (Fed. Cir. 2013)
<i>Ariad Pharms., Inc. v. Eli Lilly & Co.,</i> 598 F.3d 1336 (Fed. Cir. 2010) (en banc)
Bancorp Servs, L.L.C. v. Sun Life Assurance Co. of Can., 687 F.3d 1266 (Fed. Cir. 2012)
Bilski v. Kappos, 130 S. Ct. 3218 (2010)
Capon v. Eshhar, 418 F.3d 1349 (Fed. Cir. 2005)
Clear with Computers, LLC v. Dick's Sporting Goods, Inc., No. 6:12-CV-674, 2014 WL923280 (E.D. Tex. Jan. 21, 2014)27
CLS Bank Int'l v. Alice Corp., 717 F.3d 1269 (Fed. Cir. 2013) (en banc), cert. granted, 134 S. Ct. 734 (2013)
CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366 (Fed. Cir. 2011)
Dealertrack, Inc. v. Huber, 674 F.3d 1315 (Fed. Cir. 2012)
Digitech Image Techs., LLC v. Sigma Corp., No. 8:12-cv-1681, 2013 WL 3947137 (C.D. Cal. July 31, 2013)29, 30
Enzo Biochem, Inc. v. Gen-Probe, Inc., 323 F.3d 956 (Fed. Cir. 2002)
Fort Props., Inc. v. Am. Master Lease, LLC, 671 F.3d 1317 (Fed. Cir. 2012)34

Page((s)
Gottschalk v. Benson, 409 U.S. 63 (1972)	4
In re Barker, 559 F.2d 588 (C.C.P.A. 1977)7	6
<i>In re Best</i> , 562 F.2d 1252 (C.C.P.A. 1977)56, 57, 6	1
<i>In re Spada</i> , 911 F.2d 705 (Fed. Cir. 1990)5	6
<i>In re Yamamoto</i> , 740 F.2d 1569 (Fed. Cir. 1984)	1
Internet Patents Corp. v. Gen. Auto. Ins. Servs., Inc., No. C 12-05036 JSW, 2013 WL 7936688 (N.D. Cal. Sept. 24, 2013)	8
Lockwood v. Am. Airlines, Inc., 107 F.3d 1565 (Fed. Cir. 1997)	1
Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012)	9
Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306 (Fed. Cir. 2003)	5
OIP Techs., Inc. v. Amazon.com, Inc., No. C-12-1233, 2012 WL 3985118 (N.D. Cal. Sept. 11, 2012)2	8
Parker v. Flook, 437 U.S. 584 (1978)	9
Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc)	3
PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299 (Fed. Cir. 2008) 7	1

Page(s	;)
Schering Corp. v. Geneva Pharms., Inc., 339 F.3d 1373 (Fed. Cir. 2003)56	5
SiRF Tech., Inc. v. ITC, 601 F.3d 1319 (Fed. Cir. 2010)	
Uniloc USA, Inc. v. Rackspace Hosting, Inc., No. 6:12-CV-375, 2013 WL 7393173 (E.D. Tex Mar. 27, 2013)27, 35	5
STATUTES	
35 U.S.C. § 101passim	1
35 U.S.C. § 102(b)	1
35 U.S.C. § 103)
35 U.S.C. § 112	5
35 U.S.C. § 112(a))
35 U.S.C. § 321)
35 U.S.C. § 324(a)	3
AIA § 18)
AIA § 18(d)(1)	5
OTHER AUTHORITIES	
37 C.F.R. 42.302(b)	5
37 C.F.R. § 42.8(b)(3)	5
37 C.F.R. § 42.8(b)(4)	5
37 C.F.R. § 42.10	
37 C.F.R. § 42.10(c) and	5
37 C.F.R. § 42.300(b)21	

	Page(s)
37 C.F.R. § 42.300 et seq	1
37 C.F.R. § 42.301	13, 16
157 Cong. Rec. S1365 (daily ed. March 8, 2011)	13
CBM2012-00001, Paper 36 (P.T.A.B. Jan. 9, 2013)	14, 15, 16
CBM2012-00002, Paper 10 (P.T.A.B. Jan. 25, 2013)	18
CBM2012-00003, Paper 15 (P.T.A.B. Feb. 12, 2013)	16, 17
MPEP § 2112.01	56
MPEP § 2163	75, 77

LIST OF EXHIBITS¹

Corrected Exhibit 1001: U.S. Patent No. 8,313,023

Corrected Exhibit 1002: U.S. Patent No. 3,083,906

Corrected Exhibit 1003: U.S. Patent No. 3,795,795

Corrected Exhibit 1004: U.S. Pat. Appl. Pub. No. 2003/0200144 to

Antonucci et al.

Corrected Exhibit 1005: U.S. Pat. Appl. Pub. No. 2002/0143614 to

Maclean et al.

Corrected Exhibit 1006: U.S. Patent No. 7,703,673

Corrected Exhibit 1007: Patent File History for U.S. Patent No.

7,703,673

Corrected Exhibit 1008: Declaration of Sandeep Chatterjee

Corrected Exhibit 1009: Patent File History for U.S. Patent No.

8,313,023

Corrected Exhibit 1010: Transitional Program for Covered Business

Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77

Fed. Reg. 157 (August 14, 2012)

Corrected Exhibit 1011: Office Patent Trial Practice Guide, 77 Fed. Reg.

157 (August 14, 2012)

Corrected Exhibit 1012: Loyalty Conversion Systems Corp. v. US Airways,

2:13-cv-00666, Complaint

¹ In response to the Notice of Filing Date Accorded to Petition dated April 1, 2014, and as advised by Trial Paralegal Althea Wilburn, Corrected Exhibits have been filed concurrently herewith including labels identifying the first-named Petitioner, Delta Air Lines, Inc.

Page(s)

Corrected Exhibit 1013: Loyalty Conversion Systems Corp. v. Delta Air

Lines, 2:13-cv-00659, Complaint

Corrected Exhibit 1014: Loyalty Conversion Systems Corp. v. United

Airlines, 2:13-cv-00665, Complaint

Corrected Exhibit 1015: Loyalty Conversion Systems Corp. v. Frontier

Airlines, 2:13-cv-00660, Complaint

Corrected Exhibit 1016: Loyalty Conversion Systems Corp. v. American

Airlines, 2:13-cv-00655, Complaint

I. INTRODUCTION AND STATEMENT OF RELIEF REQUESTED (37 C.F.R. § 42.22(a))

In response to the Notice of Filing Date Accorded to Petition dated April 1, 2014 and pursuant to 35 U.S.C. § 321 and § 18 of the Leahy-Smith America Invents Act ("AIA") and pursuant to 37 C.F.R. § 42.300 *et seq.*, Delta Air Lines, Inc. ("Delta"), Frontier Airlines, Inc. ("Frontier")², United Airlines, Inc. ("United"), US Airways, Inc. (US Airways), and American Airlines, Inc. ("American") (collectively, "Petitioners") hereby request post-grant review of claims 31-34, 36-42, and 44-46 of U.S. Patent No. 8,313,023 ("the '023 Patent," attached as Corrected Exhibit 1001), now purportedly assigned to Loyalty Conversion Systems Corporation ("LCSC").

II. PRELIMINARY STATEMENT

The specification of the '023 Patent is directed to nothing more than the abstract and well-known concept of currency conversion. *See* Ex.³ 1001 at col. 2:32-39 and Fig. 2 (showing 100 entertainment rewarded to \$100); *see also* Ex. 1002 and Ex. 1003 (showing a 1963 and a 1974 slide-rule used for currency conversion). No novel hardware or software for implementation of this currency

² Indigo Partners LLC acquired Frontier Airlines on or about December 3, 2013.

³ All references to "Ex." are to Corrected Exhibits being filed concurrently herewith.

conversion is disclosed in the '023 Patent. Indeed, the '023 patent acknowledges that only a simple calculation is required to convert currency, and that such a conversion can be performed by using nothing more than a general purpose computer and a general computer program written in any expression or any language. For example, the '023 Patent explicitly states that "[a]ny kind of computer system or other apparatus adapted for carrying out the methods described herein is suited . . . [such that a] typical combination of hardware and software *may be a general purpose computer system with a computer program*." Ex. 1001 at 5:64-6:3 (emphases added).

In addition to describing the abstract concept of currency conversion with a general purpose computer, the '023 Patent also contemplates that the claimed methods can be implemented by a human being. See id. at 3:42-44 ("the methods detailed herein can also be methods performed at least in part by a service agent and/or a machine manipulated by a service agent," (emphases added)). Such simple calculations that can be performed by human beings, without the use of any inventive, special-purpose hardware or software, are as a matter of law unpatentable abstract ideas. See, e.g., Bilski v. Kappos, 130 S. Ct. 3218, 3230 (2010); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1294 (2012).

The claims of the '023 Patent simply reiterate the abstract concepts described in the specification. For instance, claims 31-34, 36-42, and 44-46 of the '023 Patent ("the '023 Patent Claims") are directed to "conversion or transfer of at least a subset of non-negotiable credits into the quantity of entity independent funds," where "non-negotiable credits" are loyalty points of a loyalty program and the entity independent funds are negotiable funds that are a "monetary equivalent" of the non-negotiable credits. *Id.* at 4:23-25, Fig. 2. For these reasons, and as more fully set forth below, the '023 Patent Claims are invalid under at least 35 U.S.C. § 101. *Infra* at § VII.A.

The '023 Patent is also invalid as being anticipated and/or rendered obvious by several prior art references. During prosecution, the applicants submitted Information Disclosure Statements that included 82 pages listing over 800 pieces of prior art. Yet the '023 Patent issued a mere 5 months after filing. Loyalty reward programs have been in existence for decades. And the ability to convert a form of currency, in particular of loyalty points, has been in existence since well before the '023 Patent was filed. For instance, U.S. Pat. Appl. Pub. No. 2003/0200144 to Antonucci et al. (Ex. 1004) specifically describes the exact process the '023 Patent Claims as inventive. Ex. 1004, ¶ [0157] (emphases added) ("...if a consumer desires to transfer *five hundred Hilton Reward points to a United Airlines frequent flyer account*, the conversion engine may determine that the five hundred Hilton

Rewards points only translate into one hundred United Airlines frequent flyer points.").

Similarly, U.S. Pat. Appl. Pub. No. 2002/0143614 to MacLean et al. (Ex. 1005) discloses a web-based system to "convert points of one LP [loyalty program] into points issued by a different LP [loyalty program]." Ex. 1005, ¶ [0017]; see also Figs. 6A-I. Thus, a review of *MacLean* and *Antonucci*, by one of ordinary skill in the art plainly reveals that the '023 Patent Claims, in addition to claiming non-patentable subject matter under Section 101, are also invalid under 35 U.S.C. §§ 102 and 103. *Infra* at §§ VII.B-D.

The '023 Patent Claims also fail to satisfy the requirements of 35 U.S.C. § 112, because they fail to adequately describe or set out the definition of the "commerce partner" that manages a loyalty program and receives compensation in exchange for providing loyalty points for conversion from loyalty points of an entity. This is clear when looking at the '023 Patent, which is a continuation of U.S. Patent No. 7,703,673 (Corrected Exhibit 1006) and was filed 6 years after its parent ("the '673 Parent Patent"). The specifications are nearly identical. However, neither discloses a "commerce partner." Moreover, the '023 Patent Claims include terms that were stripped out of the '673 Patent claims in light of Examiner rejections. Specifically, during prosecution of the '673 Parent Patent, applicants amended the claims to replace "non-negotiable credits" with "entertainment

credits" to overcome a prior art rejection. *See e.g.*, Corrected Exhibit 1007, Amendment Aug. 12, 2009. Applicants, however, re-introduced "non-negotiable credits" into the claims of the '023 Patent. For these reasons as well, the '023 Patent Claims are invalid under 35 U.S.C. § 112. *Infra* at § VII.E.

III. MANDATORY NOTICES INTRODUCTION AND STATEMENT OF RELIEF REQUESTED (37 C.F.R. § 42.22(a))

A. Real Party-In-Interest

The real parties-in-interest are Delta Air Lines, Inc., Frontier Airlines, Inc., United Airlines, Inc., US Airways, Inc., and American Airlines, Inc. Indigo Partners, LLC is also a real party-in-interest by virtue of its ownership of Frontier.

B. Related Matters

The '023 Patent is presently the subject of litigation in the United States

District Court for the Eastern District of Texas, in the following cases which may

affect or be affected by a decision in this proceeding:

Plaintiff	Defendants	Case No.
	American Airlines, Inc.	2:13-cv-00655
	Delta Air Lines, Inc.	2:13-cv-00659
	Frontier Airlines, Inc.	2:13-cv-00660
Loyalty Conversion	Hawaiian Airlines, Inc	2:13-cv-00661
Systems Corp.	Jetblue Airways Corp	2:13-cv-00662

Plaintiff	Defendants	Case No.
	Southwest Airlines Co	2:13-cv-00663
	Spirit Airlines, Inc	2:13-cv-00664
	United Airlines, Inc	2:13-cv-00665
	US Airways, Inc.	2:13-cv-00666

C. Lead and Back-Up Counsel and Service Information

In accordance with 37 C.F.R. §§ 42.8(b)(3) and 42.8(b)(4), Petitioners American, Delta, Frontier, United, and US Airways, identify Saqib Siddiqui as lead counsel and Stephen E. Baskin as back-up counsel, and identifies the following service information:

Lead Counsel and Service Info.	Backup Counsel
Saqib J. Siddiqui (Reg. No. 68,626)	Stephen E. Baskin (<i>pro hac vice</i> motion requested)
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Pursuant to 37 C.F.R. § 42.10(c) and to the authorization provided in the Notice of Filing Date Accorded to Petition dated April 1, 2014, Petitioners intend to file a motion for Stephen E. Baskin to appear before the USPTO *pro hac vice*

under 37 C.F.R. § 42.10. Pursuant to 37 C.F.R. § 42.10(b), a power of attorney was previously filed on March 17, 2014.

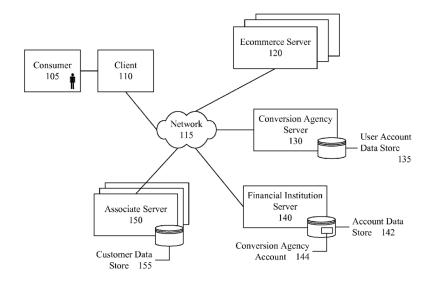
IV. OVERVIEW OF THE '023 PATENT AND ITS PROSECUTION HISTORY

A. Specification

The '023 Patent relates to converting "non-negotiable credits provided by an entity to negotiable funds." Ex. 1001, 2:32-34; and Declaration of Dr. Sandeep Chatterjee ("Ex. 1008") at ¶ 19. The "conversion can occur automatically using a Web initiated action" whereby 100 "Entertainment Rewards" are converted into "\$100." Ex. 1001 at 2:40-41 and Fig. 2; Ex. 1008, ¶ 19. The "non-negotiable credits" are described as credits, such as "frequent flier miles, consumer loyalty points, and entertainment credits" that cannot be negotiated for goods or services with any entity other than the entity issuing them to a consumer. Ex. 1001 at 1:20-37; Ex. 1008, ¶ 19. "Negotiable funds" (also described as entity independent funds) are described as a monetary amount (*e.g.*, monetary currency) that can be negotiated for goods and services and are independent of any relationship to an entity. Ex. 1001 at 5:1-13, Figure 2; Ex. 1008, ¶ 19.

As shown in Fig. 1 (reproduced below) of the '023 Patent, the disclosed "entity independent funds system" includes a client 110, which can be any of a variety of interfaces including, but not limited to another *human being*, a personal

computer . . . , a mobile phone, and the like." Ex. 1001 at 3:53-55 (emphasis added); Ex. 1008, ¶ 20.



The '023 Patent does not provide any detail regarding the hardware or structure of servers 120, 130, 140, and 150 other than the fact that they are part of a general purpose computer. Ex. 1008, ¶ 21. The '023 Patent specifically states that "[a]ny kind of computer system" including a "general purpose computer system" can be used to implement such components. Ex. 1001 at 5:64-67; Ex. 1008, ¶ 21.

With respect to the process of converting non-negotiable credits to negotiable funds, the '023 Patent merely states that the consumer can use a "conversion agency" to convert earned loyalty points into their "monetary equivalent." Ex. 1001 at 4:8-25. The '023 Patent does not disclose how the conversion takes place, or how the conversion agency is implemented. It merely states that the "conversion agency can be an independent entity that is not directly affiliated with the credit providing entities." *Id.* at 2:37-39.

As stated previously, conversion of one form of currency to another has been around for years and is not a novel concept. *See, e.g.*, Ex. 1004; Ex. 1005; and Ex. 1008, ¶ 36. Tellingly, the patent itself does not state that the mechanisms by which its claimed conversion takes place are novel. To the contrary, the patent discloses that the methods can be performed by a human being, with the assistance of only a general purpose computer system. Ex. 1008, ¶ 36; Ex. 1001 at 3:42-45 and 5:64-66 (the disclosed methods can be "performed at least in part by a service agent" and/or "[a]ny kind of computer system or other apparatus adapted for carrying out the methods described herein is suited.")

While the computer system disclosed includes servers, it is limited to basic distributed computer concepts well known in the art. *See e.g.*, Ex. 1005, Fig. 2; Ex. 1004, Fig. 9; Ex. 1008, ¶ 22. Moreover, the '023 Patent acknowledges that a special-purpose computer is not required to practice the claimed subject matter. Ex. 1001 at 5:66-6:3 ("[a] typical combination of hardware and software may be a general purpose computer system with a computer program"); Ex. 1008, ¶¶ 21, 37, 39.

Further, nothing more than a general purpose computer is needed because currency conversion is a simple calculation that can be performed by using a pen and paper, or alternatively, a manual calculator, or a slide rule. Ex. 1001 at 3:42-45 and Fig. 2; *see also* Ex. 1002 and Ex. 1003 (showing a 1963 and a 1974 slide-rule

used for currency conversion); Ex. 1008, ¶ 49. For example, the '023 Patent discloses converting 100 entertainment reward points into \$100 by simply using a 1:1 ratio. Ex. 1001 at 5:1-31, Fig. 2; Ex. 1008, ¶ 19.

The claimed "conversion," as disclosed, is nothing more than the simple application of a mathematical ratio to determine the amount of currency that should be exchanged for a number of credits or loyalty points. Ex. 1008, ¶¶ 35, 36. And, as referenced in the patent, this conversion is something that can be performed easily by a human. Ex. 1001 at 3:42-45 and 5:64-66; Ex. 1008, ¶ 23.

B. Prosecution History

U.S. Patent Application No. 13/531,904 ("the '904 Application"), filed on June 25, 2012, issued as the '023 Patent and is a continuation the '673 Parent Patent, which was filed on May 25, 2006. The specifications of the '673 Parent Patent and the '023 Patent are practically identical. The drawings and the written disclosure are the same. The '023 Patent does, however, differ in the following ways: a) the specification was amended to replace the term "invention" with "disclosure;" b) includes a New Abstract; and c) the '023 Patent includes thirty new claims. The Abstract of the '023 Patent includes new matter and references,

⁴ As discussed in a Petition filed concurrently herewith for related U.S. Patent No. 8,511,550 (also assigned to LCSC), applicant also added new subject matter via an Abstract when filing U.S. Patent No. 8,511,550.

for the first time, a "commerce partner" that receives "compensation" as part of the conversion process. Ex. 1009 As-Filed Application. No other reference to a commerce partner is made in the specification.

At the time of the filing of the '904 Application, applicants did not file a Preliminary Amendment or indicate to the Examiner that the specification had been modified or that the Abstract included new matter. Ex. 1009, As-Filed Application. By using a new Abstract, applicants injected the term "commerce partner" in the patent for the first time on June 25, 2012. *Id.*; *see also* Ex. 1006 (the entire Patent). This was also the first time applicants recited claim limitations related to a commerce partner. Thus, the asserted claims disclosing a commerce partner should not be entitled to the priority date of the '673 Parent Patent, but rather a priority date of June 25, 2012, when that limitation was first added to the application.

Moreover, when the '904 Application was filed, applicants re-introduced the term "non-negotiable credits" into the new claims. *See* Ex. 1009, As-Filed Application. This term was explicitly replaced with "entertainment credits" to overcome a prior art rejection during prosecution of the application that led to the '673 Parent Patent. Ex. 1007, Amendment, August 12, 2009.

During the prosecution of the '023 Patent, on September 6, 2012, the USPTO issued a Non-Final Office Action rejecting unchallenged claims 1-30

under as unpatentable for Obviousness-Type Double Patenting and unpatentable under section 101⁵. Ex. 1009, Non-Final Office Action. In response to the Office Action, Applicant added new claims 31-46 that—according to applicants—were "taken from a different perspective." *Id.* at Response at 15.

Specifically, claims 31-46 disclosed conversion from loyalty points of an entity to currency of a commerce partner (*i.e.*, loyalty points of the commerce partner), instead of a conversion from loyalty points to a currency that is independent from any entity (*i.e.*, monetary currency). *Id.* at Response at 9-16. These claims were allowed without any rejection over any of the disclosed prior art. Ex. 1009. The '023 Patent issued on November 20, 2012. Ex. 1001.

Further, as noted above, during prosecution applicants submitted hundreds of prior art references in multiple Information Disclosure Statements that included 82 sheets of SB/08 form listing approximately 787 references. Ex. 1009, Information Disclosure Statements. Yet, the Examiner cited to no prior art during the brief five (5) month prosecution of the '023 Patent

⁵ The 101 rejections were overcome by adding the term "non-transitory" to the claims. However, this rejection was not applied to the challenged claims.

V. GROUNDS FOR STANDING

A. At Least One Challenged Claim Is Unpatentable

As detailed herein, claims 31-34, 36-42, and 44-46 of the '023 Patent are invalid under at least one or more of 35 U.S.C. §§ 101, 102, 103, and 112. For the reasons set forth below, it is more likely than not that at least one of the claims of the '023 Patent is unpatentable. 35 U.S.C. § 324(a).

B. The '023 Patent is A Covered Business Method Patent

The AIA defines a covered business method ("CBM") patent as "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service" AIA § 18(d)(1); see also 37 C.F.R. § 42.301. The phrase, "used in the practice, administration, or management of a financial product or service," has wide applicability. "[P]ractice, administration, [or] management" is "intended to cover any ancillary activities related to a financial product or service, including. . . marketing, customer interfaces, [and] Web site management and functionality." 157 Cong. Rec. S1365 (daily ed. March 8, 2011) (statement of Sen. Schumer). The USPTO noted that the AIA's legislative history demonstrates that "financial product or service" should be "interpreted broadly," encompassing patents "claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity." Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,734, 48,735 (Aug. 14, 2012) ("Corrected Exhibit 1010"). This Board has also explained that based on the legislative history "[t]he term financial is an adjective that simply means relating to monetary matters." CBM2012-00001, Paper 36 at 23 (P.T.A.B. Jan. 9, 2013).

According to the USPTO, "patents subject to covered business method patent review are anticipated to be typically classifiable in Class 705." Ex. 1010 at 48,739. When examining the '023 Patent, the USPTO Examiner deemed class 705 within the field of classification search. Moreover, the title of the '023 Patent makes clear that the patent is directed to management of a financial product or service, i.e., "Exchange of Non-Negotiable Credits of An Entity's Rewards Program for Entity Independent Funds." Ex. 1001 (emphases added). The Abstract further elaborates that "a rewards program for *credit cards* (e.g., payment artifacts) can be established. Non-negotiable credits are accrued in response to one of the payment artifacts being used for purchases of goods or services with venders . . . The commerce partner receive at least a portion of the compensation." Ex. 1001 at Abstract (emphases added). Further, as discussed above, the '023 Patent is directed to converting non-negotiable credits to the "monetary equivalent" of the non-negotiable credits which "can be automatically transferred to a financial account" and can be "held with a financial institution."

Id. at 4:23-25 and 3:8-10. The only disclosed embodiment describes converting 100 Entertainment Rewards to \$100. *Id.* at 5:1-13 and Fig. 2.

Similarly, the '023 Patent Claims are directed to management of the financial service of converting credits to funds and explicitly recite financial elements including, for example, "conversions of quantities of non-negotiable credits to entity independent funds," "commerce partner accepts the entity independent funds for good or services," "the commerce partner is compensated for providing the entity independent funds" and "accepting at least a portion of the quantity of entity independent funds in exchange for goods or services." *Id.* at Claim 31. Independent claim 39 and dependent claims 32-34, 36-38, 40-42, and 44-46 also recite similar elements that are directed to management of the financial service of converting credits to funds.

Finally, in the complaints filed in the Eastern District of Texas against the Petitioners, the Patent Owner agrees that, in the '023 Patent, a "system and method is disclosed wherein a commerce partner agrees to accept transfers or conversions of quantities of non-negotiable credits to entity independent funds The commerce partner is compensated for providing the entity independent funds to the consumer." Ex. 1012, ¶ 9. Similarly, the Patent Owner sued nine airlines for allegedly operating "a computerized system whereby users and administrators convert loyalty program points into other unites for acquiring

goods or services." Id., ¶ 4. For at least these reasons, the '023 Patent is indisputably directed to a financial product or service and thus is subject to a CBM proceeding.

C. Claims 31-34, 36-42, and 44-46 Are Not Directed to A "Technological Invention"

The AIA excludes "patents for technological inventions" from the definition of CBM patents. AIA § 18(d)(1). To determine whether a patent is for a technological invention, "the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution." 37 C.F.R. § 42.301. To institute a CBM post-grant review, a patent need only have *one* claim directed to a CBM, and not a technological invention, even if the patent includes additional claims that are directed to technological inventions. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,756 (Aug. 14, 2012) ("Ex. 1011"); *see also* CBM2012-00001, Paper 36 at 26.

Recent decisions by the Board illustrate how these principles may be applied to system claims comprising hardware elements. For example, in considering a system claim directed to calculating insurance risk value, the PTAB stated that "on this record, none of the claim elements, such as sensors, vehicle bus, wireless transmitter, database, computer, memory, and server is novel and unobvious when considered 'without' the insurance nature of the data processed." CBM2012-

00003, Paper 15 at 13-14 (P.T.A.B. Feb. 12, 2013). Moreover, "simply using technology, even novel technology, is not sufficient to qualify for the 'technological invention' exception." *Id.* at 10. The patent must recite a novel technological feature that is not obvious over the prior art. Because the claims of the '023 Patent fail to recite a novel and unobvious technological feature *and* fail to recite a technical solution to a technical problem, the '023 Patent is not for a technological invention.

The '023 Patent makes clear that "the present disclosure permits consumers to transform non-negotiable credits provided by an entity to negotiable funds in approximately immediate fashion using the Web." Ex. 1001, 2:32-34. However, the '023 Patent does not recite a novel and unobvious technological feature because the '023 Patent only claims generic, conventional, and routine computer programs. The patent acknowledges "that the methods detailed herein can also be methods performed at least in part by a service agent," and do not require anything more than conventional hardware. *Id.* at 3:42-44. In fact, the claimed methods of currency conversion were being performed by using slide-rules decades before the '023 Patent was filed. Ex. 1002 and Ex. 1003.

For example, the only component independent claim 31 recites is "one or more computers" and the only component independent claim 39 recites is "one or more non-transitory computer-readable mediums." The patent itself concedes that

these components were well known, *e.g.*, "[a]ny kind of computer system or other apparatus . . . is suited." Ex. 1001 at 5:64-66. Such recitations are not sufficient to qualify the patent as a technological invention. "Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device," or "[r]eciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and nonobvious" will "not typically render a patent a technological invention." *See, e.g.*, Ex. 1011 at 48,764; *see also* CBM2012-00002, Paper 10 at 7-8 (P.T.A.B. Jan. 25, 2013).

The patent also does not solve a technical problem using a technological solution. The '023 Patent does not claim any improvement in computer technology. Rather, the patent admits that the claimed methods can be implemented by a human and/or by a general purpose computer system. Ex. 1001 at 5:64-67. The only problem the '023 Patent purports to solve is to "permit consumers to transform non-negotiable credits provided by an entity to negotiable funds." *Id.* at 2:31-34. This, however, is a financial problem, not a technical problem. Moreover, converting credits to funds was not a problem in May 25, 2006. Those of ordinary skill in the art already knew how to transfer credits to funds. *See infra* at §§ VII.B-

D; Ex. 1002 and Ex. 1003. Thus, the '023 Patent does not solve any problem using any solution, let alone a technological problem using a technological solution.

VI. STATEMENT OF PRECISE RELIEF REQUESTED FOR EACH CLAIM CHALLENGED

A. Claims for which Review is Requested

Petitioners respectfully request review under 35 U.S.C. § 321 and AIA § 18 of claims 31-34, 36-42, and 44-46 of the '023 Patent, and the cancellation of those claims as unpatentable. Independent claims 31 and 39 recite using known components (e.g., one or more computers or computer-readable mediums) to perform a simple calculation, namely converting "non-negotiable credits to entity independent funds," and exchanging those funds for "goods or services." Ex. 1001, 9:60-10:27; 11:2-41. The claims include steps of: (i) "a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to entity independent funds . . . ;" (ii) "granting a consumer a quantity of entity independent funds . . . ;" and" (iii) "accepting at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides." *Id.* The specification makes clear that these steps can be performed by a human being or a general purpose computer, and that the conversion is merely a simple mathematical calculation. Ex. 1001 at 3:42-45 and 5:64-66.

B. Statutory Grounds of Challenge

Petitioners respectfully request that claims 31-34, 36-42, and 44-46 be cancelled as unpatentable under 35 U.S.C. §§ 101, 102, 103, and 112. The claim constructions, reasons for unpatentability, and specific evidence supporting this request are detailed below.

C. Priority Date for Claims 31-34, 36-42, and 44-46 of the '023 Patent

The '023 Patent was filed on June 25, 2012, and is a continuation of U.S. Patent No. 7,703,673, which was filed on May 25, 2006. The '023 Patent, however, is not entitled to the earlier priority date because the subject matter of claims 31-34, 36-42, and 44-46 was not disclosed in accordance with 35 U.S.C. § 112(a) (known as §112, first paragraph prior to AIA). Accordingly, the effective filing date of the '023 Patent Claims is June 25, 2012.

As discussed below, the '673 Parent Patent fails to disclose or reference the term "commerce partner" or a commerce partner agreeing to accept transfers, conversions, and/or compensation, as recited in claims 31 and 39. *See*, *e.g.*, *Infra* at § VII.E. The term or concept of a "commerce partner" was first introduced in the '023 Patent, and only appeared when applicants provided a new Abstract in the application that led to the '023 Patent. Ex. 1009, As-filed Application. Moreover, neither the '673 Parent Patent nor the '023 Patent provide adequate written description for the conversion of loyalty points of an entity to currency of a

commerce partner (*i.e.*, loyalty points of *the commerce partner*), as required by both claims 31 and 39. *See*, *e.g.*, *Infra* at § VII.E; Ex. 1008, ¶¶115-131. Even if the earlier priority date of May 25, 2006 applies, this Petition sets forth prior art that pre-dates May 25, 2006 and thus invalidates the '023 Patent.

D. Claim Construction

1. Broadest Reasonable Interpretation

In a CBM proceeding, a claim in an unexpired patent is to be given its broadest reasonable construction in light of the specification in which it appears. 37 C.F.R. § 42.300(b); *see also In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984). The '023 Patent has not expired, and for the purposes of this proceeding only, the claims should be given their broadest reasonable interpretation. The framework for claim construction in District Court is different from the "broadest reasonable interpretation," and Petitioners reserve their rights to propose constructions in District Court based on the framework set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-18 (Fed. Cir. 2005) (en banc).

Simple statement: Pursuant to the USPTO's Office Patent Trial Practice Guide, a party may provide "a simple statement that the claim terms are to be given their broadest reasonable interpretation, as understood by one of ordinary skill in the art and consistent with the disclosure." Ex. 1011 at 48,764. Petitioners so state for all terms as supplemented by the discussion below as to terms that may

be of particular interest in this proceeding. The below constructions and the rationale therefore are supported by the declaration of Dr. Sandeep Chatterjee, Ex. 1008, ¶¶ 25-27.

Claim Term	Broadest Reasonable Interpretation
"entity"	an organization that offers a rewards program to a
	consumer
"commerce partner"	An organization that is a partner of the entity
"non-negotiable credits"	credits or points of a reward program of an entity
"entity independent	funds including monetary currency and/or loyalty
funds"	points that are not associated with the entity
"loyalty points"	a type of currency specific to an entity

2. "entity"

Claims 31 and 39 recite "wherein the non-negotiable credits have been earned as part of a rewards program of an entity." Ex. 1001 at 9:63-64 and 11:18-20. While the '023 Patent specification does not explicitly define the term "entity," the '023 Patent states "[e]ntities often reward consumers for utilizing their services with non-negotiable credits, such as frequent flier miles, consumer loyalty points, and entertainment credits" and "[t]he present disclosure permits consumers to transform non-negotiable credits provided by an entity to negotiable funds." *Id.* at 1:20-22 and 2:32-34. Similarly, independent claims 31 and 39 recite that an entity

offers non-negotiable credits as part of a rewards program. Accordingly, given the broadest reasonable interpretation, the Board should construe the term entity to mean "an organization that offers a rewards program to a consumer," as would be understood by a person of ordinary skill in the art in view of the specification and the claims. Ex. 1008, ¶¶25-27.

3. "commerce partner"

Claim 31 recites "a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to entity independent funds in accordance with a credits-to-funds ratio." Claim 39 recites "commerce partner agrees to accept transfers or conversions of quantities of the non-negotiable credits to entity independent funds in accordance with the credits-to-funds ratio." Ex. 1001, 9:60-63 and 11:15-18. There is no disclosure in the '023 Patent of a commerce partner except for the Abstract that states "[r]estrictions on use prevent the non-negotiable credits from being directly applied for a purchase of at least one goods or services of a commerce partner, which is an independent entity from the entity." *Id.* at Abstract. Accordingly, given the broadest reasonable interpretation, the Board should construe "commerce partner" to mean "an organization that is a partner of the entity," as would be understood by a person of ordinary skill in the art to be the plain meaning of the term. Ex. 1008, ¶¶25-27.

4. "non-negotiable credits"

Claims 31 and 39 recite "wherein the non-negotiable credits have been earned as part of a rewards program of an entity." Ex. 1001, 9:63-64 and 11:18-20. The '023 Patent states "[e]ntities often reward consumers for utilizing their services with non-negotiable credits, such as frequent flier miles, consumer loyalty points, and entertainment credits. These non-negotiable credits can be applied towards products and/or services provided by a granting entity or its affiliates." *Id.* at 1:20-24. Similarly, independent claims 31 and 39 recite that non-negotiable credits are earned as part of a reward program. Accordingly, given the broadest reasonable interpretation, the Board should construe "non-negotiable credits" to mean "credits or points of a reward program of an entity," as would be understood by a person of ordinary skill in the art in view of the specification and the claims. Ex. 1008, ¶¶25-27.

5. "entity independent funds"

The only disclosure provided in the specification of the '023 Patent of "entity independent funds" is currency and/or monetary value. *See*, *e.g.*, Ex. 1001 at 2:43-54, 4:23-25, 5:1-13, Fig. 2. Accordingly, given the broadest reasonable interpretation, a person of ordinary skill in the art in view of the specification would understand entity independent funds to include at least monetary currency. Moreover, claims 31 and 39 recite "wherein the entity-independent funds are

loyalty points of a loyalty program of the commerce partner" and are independent from the entity. Ex. 1001 at 10:4-6 and 11:26-28. Thus, a person of ordinary skill in the art, in view of the claims, would understand entity independent funds to also include loyalty points. Ex. 1008, ¶25-27. Accordingly, given the broadest reasonable interpretation, the Board should construe "entity independent funds" to mean "funds including monetary currency and/or loyalty points that are not associated with the entity."

6. "loyalty points"

The specification of the '023 Patent describes "loyalty points" as non-negotiable credits that are earned as part of a rewards program of an entity. *See*, *e.g.*, Ex. 1001 at 1:20-25, Fig. 2. For example, the '023 Patent discloses "[e]ntities often reward consumers for utilizing their services with non-negotiable credits, such as frequent flier miles, consumer loyalty points, and entertainment credits." *Id.* at 1:20-25. The specification also explains that these loyalty points are associated with a specific entity and can be used to purchase goods and services from that entity. *Id.* at 1:22-42. Thus, a person of ordinary skill in the art, in view of the claims, would understand "loyalty points" to be associated with a particular entity and to be used as a currency with that entity. Ex. 1008, ¶¶25-27.

Accordingly, given the broadest reasonable interpretation, the Board should construe "loyalty points" to mean "a type of currency specific to an entity."

E. Petitioners Have Been Sued For Infringement of the '023 Patent and Are Not Estopped

Petitioners have been sued for infringement of claims 31-34, 36-42, and 44-46 of the '023 Patent in the United States District Court for the Eastern District of Texas. Petitioners are not estopped from challenging the claims on the grounds identified in the petition. 37 C.F.R. 42.302(b). Exs. 1012-1016. Petitioners have not been party to any other post-grant review of the challenged claims.

VII. CLAIMS 31-34, 36-42, AND 44-46 OF THE '023 PATENT ARE UNPATENTABLE

A. <u>Ground No. 1</u>: Claims 31-34, 36-42, and 44-46 are Invalid Under 35 U.S.C. § 101

Laws of nature, abstract ideas and natural phenomena cannot be patented. *Mayo*, 132 S. Ct. at 1293. When a patent claims abstract ideas, like currency conversion, which is at the heart of the '023 Patent, it must add "significantly more" to be patent-eligible. *Id.* at 1294; *Parker v. Flook*, 437 U.S. 584, 593-94 (1978). It is not sufficient to limit the claim to "a particular technological environment" or to add "insignificant post solution activity" or "well-understood, routine, conventional activity." *Bilski*, 130 S. Ct. at 3230; *Mayo*, 132 S. Ct. at 1294. Instead, a claim involving an unpatentable concept must contain "other elements or a combination of elements, sometimes referred to as the 'inventive concept,'" sufficient to prevent patenting the underlying concept. *Mayo*, 132 S.

Ct. at 1294. Another way a claim may recite "significantly more" than an abstract idea is to be "tied to a particular machine or apparatus" or "transform[] a particular article into a different state or thing." *Bilski*, 130 S. Ct. at 3225-26, 3227. Under any of these analyses, the '023 Patent Claims fail to satisfy 35 U.S.C. § 101.

1. The '023 Patent Claims Are Unpatentably Abstract

The '023 Patent covers nothing more than the abstract concept of currency conversion. Ex. 1001 at 2:32-39; Ex. 1008, ¶ 34. The Supreme Court has many times ruled that mathematical calculations, even if they are innovative (which is not the case here), are unpatentable abstract ideas. Gottschalk v. Benson, 409 U.S. 63, 72 (1972); Flook, 437 U.S. at 587-86. Indeed, the Eastern District of Texas recently ruled that a patent for "optimizing the processing of floating point numbers," or numbers with digits to the right and left of the decimal, by a computer which is more complex than processing integers, was invalid under § 101 for claiming a mathematical formula. Uniloc USA, Inc. v. Rackspace Hosting, Inc., No. 6:12-CV-375, 2013 WL 7393173, at *4 (E.D. Tex Mar. 27, 2013) ("[J]ust as in Benson, Claim 1 discloses a 'procedure for solving a given type of mathematical problem." (quoting Benson, 409 U.S. at 65)); see also Clear with Computers, LLC v. Dick's Sporting Goods, Inc., No. 6:12-CV-674, 2014 WL923280, at * 1, *4 (E.D. Tex. Jan. 21, 2014) (ruling that claims directed to a

"system which facilitates sales from an inventory of the selling entity," were unpatentable because the independent claim could be "performed entirely by a human, mentally or with pencil and paper"). Similarly, the U.S. District Court for the Northern District of California recently ruled that a patent for "pricing a product for sale" was invalid under Section 101 because it claimed nothing more than "the calculation of a demand curve based on consumer response to different price points," and was "as abstract as *Bilski*'s patent." *OIP Techs., Inc. v. Amazon.com, Inc.*, No. C-12-1233, 2012 WL 3985118, at *2, *6, *7 (N.D. Cal. Sept. 11, 2012); *see also Internet Patents Corp. v. Gen. Auto. Ins. Servs., Inc.*, No. C 12-05036 JSW, 2013 WL 7936688, at * 4 (N.D. Cal. Sept. 24, 2013) ("[t]he addition of a computer limitation does not transform the abstract idea into a patentable invention.")

The '023 Patent likewise claims only the abstract idea of converting currency with nothing more than "well-understood, routine, conventional activity" added. *See Mayo*, 132 S. Ct. at 1294; Ex. 1008, ¶¶ 34, 35. The patent claims do not add anything beyond routine, conventional activities to this unpatentable abstract concept. *See* Ex. 1001 at 9:59-12:46; Ex. 1008, ¶¶ 34, 35.

In addition to the abstract idea of currency conversion, claim 31 involves several, but largely insignificant steps: (1) "a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to entity independent

funds in accordance with a credits-to-funds ratio...;" (2) "granting the consumer the quantity of the entity independent funds;" and (3) "accepting at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides...." Id. at 9:60-10:27; Ex. 1008, ¶ 40.

These additional steps are insignificant because they are not novel, or inventive in any way. Ex. 1008, ¶ 41. Each step lacks any significance to the abstract process of currency conversion. Id. For example, all that is really described is an agreement to accept transfers; a granting of the requested quantity; and accepting a portion of the requested quantity. *Id.* These concepts were well known before the filing of the patent, and can and are performed manually. *Id.* They are also far from novel, as they are simply describing the known process of entering into an agreement or contract. *Id.* These steps do not render the claimed methods statutory subject matter. "[I]f a claim is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory." See Digitech Image Techs., LLC v. Sigma Corp., No. 8:12-cv-1681, 2013 WL 3947137, at *8 (C.D. Cal. July 31, 2013) (quoting *Flook*, 437 U.S. at 595).

The abstract nature of the '023 Patent is confirmed by the patent itself, which makes clear that the currency conversions recited in the claims can be performed manually. Ex. 1008, ¶¶ 46-49. Specifically, the patent discloses that "the

methods detailed herein can also be methods performed at least in part by a service agent and/or a machine manipulated by a service agent in response to a service request." Ex. 1001 at 3:42-45; Ex. 1008, ¶¶ 34-38. The patent states that a consumer can interact with a "conversion agency server 130 via client 110...[which] can be any of a variety of interfaces including, but not limited to, another human being." *Id.* at 3:52-54, 60-63, FIG. 1. Moreover, the "conversion agency server 130" merely "converts "the non-negotiable credits from associated server 150 into negotiable funds." *Id.* at 4:15-18, FIG. 1. This demonstrates the claims' invalidity because methods which can be performed "in the human mind, or by a human using a pencil and paper" are unpatentable. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011).

The fact that the '023 Patent Claims may involve "[a]ny kind of computer system" including a "general purpose computer system," (Ex. 1001 at 5:64-67), does not change this result and, based upon well established case law, actually confirms that the claims are unpatentably abstract. Ex. 1008, ¶ 39. Using a computer "for no more than its most basic function—making calculations or computations—fails to circumvent the prohibition against patenting abstract ideas and mental processes." *Bancorp Servs, L.L.C. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012).

The computer must be "integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not." *Id*. "Appending generic computer functionality to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility." CLS Bank Int'l v. Alice Corp., 717 F.3d 1269, 1286 (Fed. Cir. 2013) (en banc) (citing *Bancorp*, 687 F.3d at 1278, and Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333-34 (Fed. Cir. 2012) (finding that the claimed computer-aided clearinghouse process is a patent-ineligible abstract idea)), cert. granted, 134 S. Ct. 734 (2013); SiRF Tech., Inc. v. ITC, 601 F.3d 1319, 1333 (Fed. Cir. 2010) ("In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations."); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1345 (Fed. Cir. 2013) ("simply implementing an abstract concept on a computer, without meaningful limitations to that concept, does not transform a patent-ineligible claim into a patent-eligible one.").

Nothing in the patent suggests that a computer is integral to the invention.

Rather, the patent makes clear that the computer is merely disclosed to accept the

request for conversion, convert the non-negotiable credits into entity independent funds based on a simple "credits-to-funds" ratio, and make the entity independent funds available to the consumer for use. Ex. 1008, ¶¶ 41-43. There is nothing special about the computer and, in fact, the patent specifically discloses only a general purpose computer. See Ex. 1001 at 9:59-12:46, FIG. 2, FIG. 3. Each of these steps can be performed by humans without the aide of computers and/or by merely using a slide rule. Ex. 1008, ¶¶ 36. It is clear the computer disclosed in the '023 Patent is merely automating steps humans can, and have, easily performed on their own for some time. See e.g., Infra at §§ VII.B-D; see also Exs. 1002 and 1003.

2. The '023 Patent Claims Do Not Satisfy the Machine-or-Transformation Test

The '023 Patent Claims are invalid under Section 101 for the additional reason that the claims are not tied to any particular machine and do not transform any article into a different state or thing. Ex. 1008, ¶ 53. The patent emphasizes that the so-called invention may be implemented by any general purpose computer to carry out the conversions:

The present disclosure may be realized in hardware, software, or a combination of hardware and software. The present disclosure may be realized in a centralized fashion in one computer system or in a distributed fashion where different elements are spread across

several interconnected computer systems. Any kind of computer system or other apparatus adapted for carrying out the methods described herein is suited. A typical combination of hardware and software may be a general purpose computer system with a computer program, that when being loaded and executed, controls the computer system such that it carries out the methods described herein.... Computer program in the present context means any expression, in any language, code or notation, of a set of instructions intended to cause a system having an information processing capability to perform a particular function either directly or after either or both of the following: a) conversion to another language, code or notation; b) reproduction in a different material form.

Ex. 1001 at 5:59-6:15 (emphasis added).

Nothing in the claims or the patent indicates that any particular machine or device is needed. Ex. 1008, ¶ 53. "To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not. *Bancorp*, 687 F.3d at 1278. The minimal computer involvement found in the '023 Patent has long been found insufficient to impart patent-eligibility. *See*, *e.g.*, *Benson*, 409 U.S. at 67 (invalidating claims that "can be carried out in existing computers long in use, no new machinery being necessary," and that "can also be

performed without a computer"); *Fort Props., Inc. v. Am. Master Lease, LLC*, 671 F.3d 1317, 1323 (Fed. Cir. 2012) (invalidating claims "using a computer" because the computer did not "play a significant part in permitting the claimed method to be performed" (quoting *Dealertrack*, 674 F.3d at 1333)).

Finally, the '023 Patent Claims also do not transform any article into a different state or thing. Ex. 1008, ¶ 53. Instead, the claims merely describe converting one form of currency—non-negotiable credits—into negotiable funds or entity independent funds by using a "ratio [that] can be determined by any of a variety of means." See Ex. 1001 at 5:47-51; 9:59-12:46, FIG. 2, FIG. 3. As noted above, such a conversion can be performed by a human being and would not involve changing the state of any article. Id. at 3:42-44. Further, even if the conversion is performed by a general purpose computer, and even if the conversion includes changing data from one format to another using a simple ratio, the Supreme Court has held that converting data from one format to another, through a known process, does not render a claim patent eligible. See Benson, 409 U.S. at 63 (refusing to extend 35 U.S.C. § 101 to cover methods using general purpose computers to convert binary-coded decimal numerals into pure binary numerals). Thus, performing the claimed calculation using a ratio is not a patenteligible transformation. See, e.g., CyberSource, 654 F.3d at 1375; see also

Bancorp, 687 F.3d. at 1273; *Uniloc*, 2013 WL 7393173 (holding that mere manipulation of data does not satisfy the machine-transformation test).

Because the '023 Patent Claims are not tied to a particular machine and do not transform articles, and because the claims are directed to an abstract idea without adding significantly more, the claims are invalid under 35 U.S.C. § 101.

B. Ground No. 2: Claims 31-34, 36-42, and 44-46 are Invalid Under 35 U.S.C. § 102(b) as Being Anticipated by *MacLean et al.*

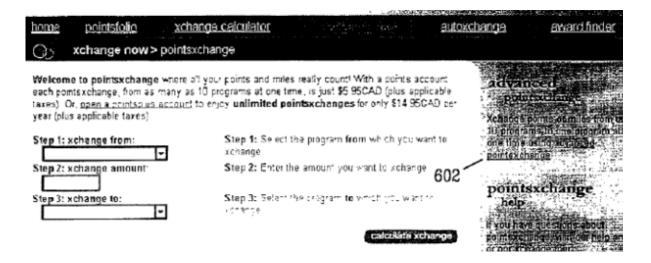
U.S. Patent Application Publication No. 2002/0143614 A1 to *MacLean et al.* ("*MacLean*") was published on October 3, 2002. The '023 Patent was filed on June 25, 2012 as a continuation of U.S. Patent No. 7,703,673. The '673 patent was filed on May 25, 2006. Accordingly, even if the '023 Patent is entitled to a priority date of May 25, 2006, *MacLean* qualifies as prior art under pre-AIA 102(b).

MacLean discloses a web-based system to "convert points of one LP into points issued by a different LP," where LP is disclosed in *MacLean* to be a loyalty program. Ex. 1005, ¶ [0017] and Figs. 6A-I; Ex. 1008, ¶ 63. As discussed below, *MacLean* discloses each and every element of claims 31-34, 36-42, and 44-46; Ex. 1008, ¶¶ 63-71 and 76-84.

1. Maclean Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein the Non-negotiable Credits and Entity Independent Funds Are Loyalty Points of Different Rewards Programs

MacLean "relates to apparatus and methods for keeping track of points and, in particular, for managing and exchanging those points that are issued and redeemed in the context of a loyalty program (LP)." Ex. 1005, ¶ [0001]. One of the "object of this invention [*MacLean*] is to enable a consumer to convert points of one LP into points issued by a different LP." Id., ¶ [0017]. The loyalty programs (LPs) disclosed in *MacLean* include "travel (airlines and hotels), financial (credit cards), retail and network (AirMiles, ClickRewards and WebMiles)." Id., ¶ [0003].

In *Maclean*, a customer 110 may interact with transaction center 120 to convert points issued by points issuer 130a to points issued by points issuer 130b. *Id.*, ¶ [0040] and Fig. 1. For example, customer 110 can use a website to "exchange points issued by American Airlines for those issued by the American Express Card." *Id.*, ¶ [0041]. Such a conversion is performed by, for example, logging into a website which offers a feature called "pointsxchange." *Id.* at Fig. 4A. As disclosed in Fig. 4A, a user may "Exchange points or miles between programs and reach awards faster than ever before." *Id. MacLean* discloses this exchange process in a step-by-step fashion process in Figs. 6A-6I (Fig. 6A copied-in-part below); Ex. 1008, ¶¶ 63-68.



As shown in Fig. 6A, using drop-down menus, a user may: 1) select a first loyalty program from which the user plans to convert points; 2) select the number of points a user wants to convert; and 3) select a second loyalty program so that loyalty points from the first program are changed to loyalty points of this program. Ex. 1005 at Fig. 6A; Ex. 1008, ¶¶ 63-68. The user may then navigate through various screens until the conversion is complete. *Id.*, ¶ [0052] and Figs. 6B-6I.

2. MacLean Discloses Converting Non-negotiable Credits to Entity Independent Funds Based On Credits-To-Fund Ratio

MacLean discloses that "[i]t is a still further object of this invention to establish a system for facilitating users to exchange points between LPs and to permit each participating point issuer to set the point **exchange rates** of its LP." Ex. 1005, ¶ [0021] (emphasis added). Thus, *MacLean* discloses exchange rates that set the ratio for conversion between different loyalty programs. Ex. 1008, ¶¶ 76, 77. One example of this ratio is disclosed as "3,600:10,000 or 0.36 between the

first issuer 900 and the second issuer 901." *Id.*, ¶ [0064]; *see also* Fig. 6F (showing "xchangevalue" for conversion LP15 and LP8).

3. MacLean Discloses a Commerce Partner That Does Not Accept Non-negotiable Credits Prior to Conversion, And Accepts The Entity Independent Funds to Provide Goods And Services After The Conversion

MacLean explains that "the number of LPs has exploded in recent years" and "[t]here are billions of points that sit in accounts with very limited redemption options and low utility to a customer, i.e., the points are kept in accounts with balance that are below redemption levels, or a levels with limited redemption options." Ex. 1005, ¶¶ [0004-06]; Ex. 1008, ¶¶ 79-81. Each loyalty program has its own restrictions and redemptions options such that "[t]ypically, each kind of point is issued and redeemed by a different LP and may have a different value or liability to its LP." Ex. 1005, ¶ [0041]. Due to such restrictions, a member of LP15 (where LP15 may be a hotel loyalty points) cannot redeem loyalty points earned from LP15 to purchase goods or services (e.g., an airline ticket) from LP8 (where LP8 may be a frequent flyer program. Id., \P [0003], [0041], and Fig. 6E; Ex. 1008, \P 79-81. Accordingly, *MacLean* discloses a system that allows users to exchange points earned from LP15 to points of LP8 such that after the conversion the user is able to purchase goods and services from the administrator of LP8 by using the converted points. Ex. 1005, ¶ [0052] and Figs. 6A-6I.; Ex. 1008, ¶¶ 79-81.

4. MacLean Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein The Commerce Partner is Compensated for Providing The Entity Independent Funds to The Consumer

MacLean discloses that "the deposit of points into an LP's accounts represents an increase in the liability of that LP." Ex. 1005, ¶ [0062]. Thus, "a withdrawal of 10,000 points from the customer's account with the first issuer 900 will pay \$80 in step 911 to the transaction center 902. The transaction center 902 levies in step 912 a transaction fee in the amount of \$8 that was set as a percentage of the cost of the withdrawal, leaving \$72 (913) available to buy points from the second issuer 901." *Id.*, ¶ [0064]; *see also* Fig. 9; Ex. 1008, ¶¶ 70, 81.

5. Claim Chart for Claims 31-34, 36-42, And 44-46 And MacLean

A claim chart disclosing each and every element of claims 31-34, 36-42, and 44-46 in *MacLean* is included below. Ex. 1008, \P 83.

	Claims of the '023 Patent	Exemplary Disclosure of MacLean
system 100 of this invention permits a customer to effect an exchange of points from one LP to anothe For example, a customer may exchange points issued by American Airlines for those issued by the American Express Card. Alternatively, the customer may transfer points issued by any number of LPs to a single LP, whereby the customer may	[31 A] A method comprising: a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to	"As will be explained below, the point management system 100 of this invention permits a customer to effect an exchange of points from one LP to another. For example, a customer may exchange points issued by American Airlines for those issued by the American Express Card . Alternatively, the customer may transfer points issued by any number of LPs to a single LP, whereby the customer may redeem its collected points for the rewards offered by the single LP." Ex. 1005, ¶ [0041] (emphases added); see also Ex. 1005, Abstract; ¶¶ [0017] and

Claims of the '023 Patent	Exemplary Disclosure of MacLean
	welcome to pointsxchange where all your points and it each pointsxchange, from as many as 10 programs at or taxes) Or, open a prints as account to ergoy unlimited year (plus applicable taxes) Step 1: xchange from: Step 2: xchange amount: Step 3: xchange to: Step 3: xchange to: Step 3: 5ell Fig. 6A (partial); Ex. 1008, ¶¶ 63-71 and 76-84.
[31 B] in accordance with a creditsto-funds ratio	"It is a still further object of this invention to establish a system for facilitating users to exchange points between LPs and to permit each participating point issuer to set the point exchange rates of its LP." Ex. 1005, ¶ [0021] (emphases added). "In this example, the customer sees an effective points exchange rate of 3,600:10,000 or 0.36 between the first issuer 900 and the second issuer 901." <i>Id.</i> , ¶ [0064]; <i>see also</i> Fig. 6F (showing "xchange value" for conversion LP15 to LP8); Ex. 1008, ¶¶ 77, 78.
[31 C] wherein the non-negotiable credits have been earned as part of a rewards program of an entity,	"This invention relates to apparatus and methods for keeping track of points and, in particular, for managing and exchanging those points that are issued and redeemed in the context of a loyalty program (LP)." Ex. 1005, ¶ [0001]. "The points managed by the system 100 may take the form of a variety of Loyalty Program ('LP') points such as those issued by airlines, hotels, financial entities, e.g., credit cards, and networks, e.g., portal web sites on the Internet." <i>Id.</i> , ¶ [0040].

Claims of the '023 Patent	Exemplary Disclosure of MacLean
	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." <i>Id.</i> , ¶ [0057]; Ex. 1008, ¶¶ 65, 66.
wherein the commerce partner accepts the entity independent funds for goods or services that the commerce partner provides, wherein in absence of the non-negotiable credits being converted or transferred into the entity independent funds the commerce partner does not accept the non-negotiable credits for the	"Typically, each kind of point is issued and redeemed by a different LP and may have a different value or liability to its LP." Ex. 1005, ¶ [0041]; see also Id., ¶ [0005-06]. These restrictions prevent a commerce partner from accepting loyalty points (e.g., "non-negotiable credits") of another entity until the loyalty points are converted to loyalty points (e.g., "entity independent funds") of the commerce partner. "It is a still further object of this invention to enable a customer to convert points of one LP into points issued by a different LP." Id., ¶ [0041].
negotiable credits for the goods or services that the commerce partner provides,	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." <i>Id</i> ,. ¶ [0057]. "For example, a customer may exchange points issued by American Airlines for those issued by the American Express Card." <i>Id.</i> , ¶ [0041]; <i>see also</i> Figs.
[31 E]	6A-6I; Ex. 1008, ¶¶ 63-71 and 76-84.
wherein the entity- independent funds are loyalty points of a loyalty program of the commerce partner;	"The points managed by the system 100 may take the form of a variety of Loyalty Program ("LP") points such as those issued by airlines, hotels, financial entities, e.g., credit cards, and networks, e.g., portal web sites on the Internet." Ex. 1005, ¶ [0040].
	"As will be explained below, the point management system 100 of this invention permits a customer to

Claims of the '023 Patent	Exemplary Disclosure of MacLean
	effect an exchange of points from one LP to another. For example, a customer may exchange points issued by American Airlines for those issued by the American Express Card." <i>Id.</i> , ¶ [0041]; Ex. 1008, ¶¶ 65, 66.
[31 F]	
at least one of one or more computers detecting a communication over a network to grant a consumer a quantity of the entity independent funds,	"[T]he transaction center 120, operates as a "web portal" for the customers 110 through which they may view their current points balances for each issuer 130 and request the exchange of points between issuers 130a-c. The transaction center 120 acts as a "currency exchange" for the issuers 130a-c, effecting the exchange of points from one issuer to another." Ex. 1005, ¶ [0043]; Fig. 2 and Figs. 6A-I.
	see also:
	"The customer carries out point exchanges by use of its customer terminal 110, which includes a customer computer 201 and a web browser 202. The customer "surfs" to a web site provided by the transaction center 120. Upon prompting, the customer enters the following data into the website: 1) information about itself and 2) data identifying each of the issuer LPs from which points are to be withdrawn, each of the issuer LPs to which points are to be deposited, and the number of points to be withdrawn from each of the withdrawing LPs. This data is transmitted over the Internet 205 to the transaction center 120, where the transmitted data is processed as will be described below." <i>Id.</i> , ¶ [0045]; Ex. 1008, ¶¶ 63-71 and 76-84.
[31 G]	"After designating the withdrawing LPs, step 507 compares the current point balances of the
wherein the quantity of entity independent funds results	customer's accounts in the withdrawing LPs with the number of points requested in step 506 and if the

Claims of the '023 Patent	Exemplary Disclosure of MacLean
from a conversion or transfer of at least a subset of the nonnegotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio,	points are available in the customer's LP accounts, then the point exchange program 500 moves to step 509, which displays a web page 630 as shown in FIG. 6D. Web page 630 includes a box 632 for permitting the customer to designate the depositing LP to which the points are transferred In step 510, the customer selects the depositing LP and clicks on "calculate advanced xchange" button 634. Step 511 calculates the exchange rates for this points transaction and displays page 640, a summary of the withdrawal and deposit points, as illustrated in FIG. 6E In particular, step 511 calculates the number of points to be transmitted to the designated depositing LP and displays in columns 643-647respectively the withdrawing LPs, the number of points to be withdrawn, the number of points in the withdrawing LPs (the customer's account balance) before the exchange, and the number of points after the exchange. The customer clicks in step 512 on "continue xchange" button648 to confirm that the pending transaction is correct After the customer's credit card information has been entered in step 516, step517 displays a web page 670 which sets out as shown in FIG. 6H a "cancel" button 674, a "reset" button 676 and a "submit" button 678, which permits the customer to cancel or revise the credit card information and, if satisfactory, to click on the "submit" button 678 in step 618, whereby the customer's credit card data is submitted to effect payment for the exchange, and to display in step 519 a web page 680 which summarizes, as shown in FIG. 6I, the points exchanged and issues a confirmation number 682." Ex. 1005, ¶ [0052] (emphases added) and Figs. 6A-6I; Ex. 1008, ¶ 63-71 and 76-84.
[31 H]	"Once the details of the requested points exchange have been accumulated and confirmed by the web

Claims of the '023 Patent	Exemplary Disclosure of MacLean
wherein the subset of the non- negotiable credits are expended as part of the conversion or transfer,	server 230, as shown in FIG. 2, the points exchange program 500 is executed in a two-step procedure. The first step performs all of the points withdrawals from the designated withdrawing LPs and the second step performs the points deposit to the designated depositing LPs." Ex. 1005, ¶ [0053] (emphases added) and Fig. 6I; Ex. 1008, ¶¶ 63-71 and 76-84.
and wherein the commerce partner is compensated for providing the entity independent funds to the consumer;	"In order for a points exchange to be executed, each points withdrawal or deposit transaction must be monetized, i.e. the set of points to be exchanged must be convertible into a common currency which has a recognized relation to each of the LPs involved in the transaction. For example, the points of the withdrawing LP have a first value per point in U.S. dollars, whereas the points of the depositing LP has a second value per point in U.S. dollars Any withdrawal of points from that LP's accounts represents a real reduction in that liability and has a monetary value. By defining a rate per point that the LP is willing to pay to have points withdrawn from their accounts, the LP is able to "buy down" that liability. This rate, called the point withdrawal rate, represents the monetization of first half of the points exchange. Similarly, the deposit of points into an LP's accounts represents an increase in the liability of that LP. By defining a rate per point that the LP is willing to be paid to deposit points into their accounts, the LP is able to "sell" their points currency. This rate, called the point deposit rate, represents the monetization of the second half of the points exchange." Ex. 1005, ¶ [0062] (emphases added). "A withdrawal of 10,000 points in step 910 from the first issuer 900 is requested. The first issuer 900 has examined its liability/points and set its point

Claims of the '023 Patent	Exemplary Disclosure of MacLean
	withdrawal rate at \$0.008 per point. This means that for a withdrawal of 10,000 points from the customer's account with the first issuer 900 will pay \$80 in step 911 to the transaction center 902. The transaction center 902 levies in step 912 a transaction fee in the amount of \$8 that was set as a percentage of the cost of the withdrawal, leaving \$72 (913) available to buy points from the second issuer 901, which has set in step 914 its point deposit rate at \$0.02. <i>Id.</i> , ¶ [0064]; <i>see also</i> ¶ [0067], and Fig. 9; Ex. 1008, ¶¶ 81, 82.
[31 J] responsive to the communication, at least one of one or more computers granting the consumer the quantity of the entity independent funds; and	"[T]he transaction center 120, operates as a "web portal" for the customers 110 through which they may view their current points balances for each issuer 130 and request the exchange of points between issuers 130a-c. The transaction center 120 acts as a "currency exchange" for the issuers 130a-c, effecting the exchange of points from one issuer to another." Ex. 1005, ¶ [0043]; Fig. 2 and Figs. 6A-I.
	"Once the details of the requested points exchange have been accumulated and confirmed by the web server 230, as shown in FIG. 2, the points exchange program 500 is executed in a two-step procedure. The first step performs all of the points withdrawals from the designated withdrawing LPs and the second step performs the points deposit to the designated depositing LPs." <i>Id.</i> , ¶ [0053] (emphases added); Ex. 1008, ¶¶ 63-71 and 76-84.
[31 K] the at least one of the one or more computers accepting at least a portion of the quantity	"Typically, each kind of point is issued and redeemed by a different LP and may have a different value or liability to its LP." Ex. 1005, ¶ [0041]; see also Id., ¶¶ [0005-06].
of entity independent funds in exchange for the goods or services that the commerce	"It is a still further object of this invention to enable a customer to convert points of one LP into points

Claims of the '023 Patent	Exemplary Disclosure of MacLean
partner provides, wherein the one or more computers do not accept the non-negotiable credits of the entity's rewards program for the goods or services in absence of the conversion or transfer.	issued by a different LP." <i>Id.</i> , ¶ [0017]. "In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." <i>Id.</i> , ¶ [0057]; <i>see also</i> Figs. 6A-6I; Fig. 2 ("Issuer Terminal 130a," "Transaction Center 120" and "Customer Terminal 11a.") <i>Id.</i> , ¶ [0043] and Fig. 2; Ex. 1008, ¶¶ 63-71 and 76-84.
[32] The method of claim 31, wherein the granting of the quantity of entity independent funds comprises: at least one of the one or more computers accessing a loyalty program account for the loyalty program that the commerce partner maintains for the consumer; and at least one of the one or more computers adding the quantity of entity independent funds, referred to as loyalty points, to an existing quantity of loyalty points for the consumer, wherein records for the loyalty program account are maintained by the one or more computers within one or more non-transitory storage mediums.	"Once the details of the requested points exchange have been accumulated and confirmed by the web server 230, as shown in FIG. 2, the points exchange program 500 is executed in a two-step procedure. The first step performs all of the points withdrawals from the designated withdrawing LPs and the second step performs the points deposit to the designated depositing LPs." Ex. 1005, ¶ [0053]; see also Id., ¶ [0046] ("extracts current points balances for the customer from each issuer terminal 130a-c") and Fig. 2 ("Issuer Databases 285a-c"); Ex. 1008, ¶¶ 63-71 and 76-84.
[33] The method of claim 32, further comprising: at least one of the one or more computers completing a sale of the goods or services,	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." Ex. 1005, ¶ [0057]; Fig. 2 ("Issuer

Claims of the '023 Patent	Exemplary Disclosure of MacLean
where the consumer expends at least the portion of the quantity of entity independent funds in exchange for the goods or services that the	Terminal 130a," "Transaction Center 120" and "Customer Terminal 11a."); see also Ex. 1008, ¶¶ 63-71 and 76-84.
commerce partner provides. [34] The method of claim 31, further comprising: at least one of the one or more computers transferring or converting the subset of the non-negotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio.	"In this example, the customer sees an effective points exchange rate of 3,600:10,000 or 0.36 between the first issuer 900 and the second issuer 901." Ex. 1005, ¶ [0064]; see also Fig. 2 (computers); and Fig. 6F ("xchange value" and conversion of "LP15" to "LP8"); Ex. 1008, ¶¶ 63-71 and 76-84.
[36] The method of claim 31, wherein a single one of the one or more computers detects the communication, grants the consumer the quantity of entity independent funds, and accepts the portion of the quantity of entity independent funds.	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." <i>Id</i> ,. ¶ [0057]; <i>see also</i> Figs. 6A-6I; Fig. 2 ("Issuer Terminal 130a," "Transaction Center 120" and "Customer Terminal 11a.") <i>Id</i> ., ¶ [0047]; Ex. 1008, ¶¶ 63-71 and 76-84.
[37] The method of claim 31, wherein a plurality of different ones of the one or more computers detects the communication, grants the consumer the quantity of entity independent funds, and accepts the portion of the quantity of entity independent funds.	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." <i>Id</i> ,. ¶ [0057]; <i>see also</i> Figs. 6A-6I; Fig. 2 ("Issuer Terminal 130a," "Transaction Center 120" and "Customer Terminal 11a.") <i>Id</i> ., at ¶ [0047]; Ex. 1008, ¶¶ 63-71 and 76-84.
[38] The method of claim 31, wherein the one or more computers are owned by or	"In one illustrative embodiment, each issuer terminal 130a-c presides in a facility controlled by the issuer and is part of the system that manages that

Claims of the '023 Patent	Exemplary Disclosure of MacLean
operated for the commerce partner.	LP." Ex. 1005, ¶ [0047]
[39A] A computer program product comprising: one or more non-transitory computer-readable mediums;	"Referring now to Figures. 5A and B, there is shown a program 500 that is stored and executed in the transaction center 120, whereby a series of web pages as shown in FIGS. 6A-I are displayed to implement the exchange of points from a first issuer LP from which points are withdrawn, i.e., a withdrawing LP, to a second issuer LP to which points are received, i.e., a depositing LP. Referring to FIG. 5A, the first phase of the points exchange program 500 is executed by the web server 230, to gather and confirm the specifics of the points exchange from the customer 110." Ex. 1005, ¶ [0052]; see also Fig. 2; Ex. 1008, ¶¶ 63-71 and 76-84.
[39B] program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to detect a communication over a network to grant a consumer a quantity of entity independent funds, wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of nonnegotiable credits into the quantity of entity independent funds in accordance with a credit-to-funds ratio, wherein the subset of the nonnegotiable credits are expended as part of the conversion or transfer, and wherein the commerce partner	See, e.g. supra discussion/citations for claim elements [31A]-[31I]; see also Figs. 6A-6I.

Claims of the '023 Patent	Exemplary Disclosure of MacLean
is companyated for providing	
is compensated for providing	
the entity independent funds	
to the consumer, wherein the	
commerce partner agrees to	
accept transfers or	
conversions of quantities of	
the non-negotiable credits to	
entity independent funds in	
accordance with the credits-	
to-funds ratio, wherein the	
non-negotiable credits have	
been earned as part of a	
rewards program of the entity,	
wherein the commerce partner	
accepts the entity independent	
funds for goods or services	
that the commerce partner	
provides, wherein in absence of the non-negotiable credits	
being converted or transferred	
into the entity independent	
funds the commerce partner	
does not accept the non-	
negotiable credits for the	
goods or services that the	
commerce partner provides,	
wherein the entity-	
independent funds are loyalty	
points of a loyalty program of	
the commerce partner;	
1	
[39C] one or more non-	See, e.g. supra discussion/citations for claim element
transitory computer-readable	[31J]; see also Fig. 2.
mediums; program	
instructions, stored on at least	
one of the one or more non-	
transitory computer-readable	
mediums, to, responsive to	

Claims of the '023 Patent	Exemplary Disclosure of MacLean
the communication, grant the	
consumer the quantity of the	
entity independent funds; and	
[39D] program instructions,	See, e.g. supra discussion/citations for claim element
stored on at least one of the	[31K].
one or more non-transitory	
computer-readable mediums,	
to accept at least a portion of	
the quantity of entity	
independent funds in	
exchange for the goods or	
services that the commerce	
partner provides, wherein, per	
the program instructions, the	
non-negotiable credits are not	
accepted for the goods or	
services in absence of the	
conversion or transfer.	
[40] The computer program	See, e.g. supra discussion/citations for claim [32];
product of claim 39, wherein	see also Fig. 2.
the program instructions to	
grant of the quantity of entity	
independent funds comprise:	
program instructions, stored	
on at least one of the one or	
more non-transitory	
computer-readable mediums,	
to access a loyalty program	
account for the loyalty	
program that the commerce	
partner maintains for the	
consumer; and program	
instructions, stored on at least	
one of the one or more non-	
transitory computer-readable	
mediums, to add the quantity	
of entity independent funds,	
referred to as loyalty points,	

Claims of the '023 Patent	Exemplary Disclosure of MacLean
to an existing quantity of loyalty points for the consumer, wherein records for the loyalty program account are maintained by the one or more computers within one or more non-transitory storage mediums. [41] The computer program product of claim 39, further comprising: program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to complete a sale of the goods or services, where the consumer expends at least the portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides.	See, e.g. supra discussion/citations for claim [33].
[42] The computer program product of claim 39, further comprising: program instructions, stored on at least one of the one or more nontransitory computer-readable mediums, to transfer or convert the subset of the nonnegotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio. [44] The computer program product of claim 39, wherein	See, e.g. supra discussion/citations for claim [34]. See, e.g. supra discussion/citations for claim [36].

Claims of the '023 Patent	Exemplary Disclosure of MacLean
the program instructions to	
detect the communication, the	
program instructions to grant	
the consumer the quantity of	
entity independent funds, and	
the program instructions to	
accept the portion of the	
quantity of entity independent	
funds.	
[45] The computer program	See, e.g. supra discussion/citations for claim [37].
product of claim 39, wherein	
a plurality of different	
computers communicating	
with each other execute the	
program instructions to detect	
the communication, the	
program instructions to grant	
the consumer the quantity of	
entity independent funds, and	
the program instructions to	
accept the portion of the	
quantity of entity independent	
funds.	
[46] The computer program	See, e.g. supra discussion/citations for claim [38].
product of claim 39, wherein	
the one or more computers	
upon which the program	
instructions are loaded and	
executed are owned by or	
operated for the commerce	
partner.	

C. Ground No. 3: Claims 31-34, 36-42, and 44-46 Are Invalid Under 35 U.S.C. § 102(b) as Being Anticipated By *Antonucci et al.*

U.S. Patent Application Publication No. 2003/0200144 A1 to Antonucci et al.⁶ ("Antonucci") was published on October 23, 2003. The '023 Patent was filed on June 25, 2012 as a continuation of U.S. Patent No. 7,703,673. The '673 patent was filed on May 25, 2006. Even if the '023 Patent is entitled to a priority date of May 25, 2006, Antonucci qualifies as prior art under pre-AIA 102(b).

Antonucci discloses "facilitating the substantially real-time transfer of loyalty points between accounts" such that "if a consumer desires to transfer **five hundred Hilton Reward points to a United Airlines frequent flyer account**, the conversion engine may determine that the five hundred Hilton Rewards points only translate into one hundred United Airlines frequent flyer points." Ex. 1004, Abstract and ¶ [0157] (emphases added). Antonucci explicitly discloses all but one element of claims 31-34, 36-42, and 44-46. The only element Antonucci does not explicitly disclose is compensating the commerce partner for providing entity independent funds. However, as discussed in detail below, one of ordinary skill in the art would understand that Antonucci inherently discloses providing

⁶ Like *MacLean*, *Antonucci* is listed on the face of the '023 Patent and was submitted by applicants within 82 sheets of SB/08 form that included over 800 pieces of prior art.

compensation to an entity as consideration for the entity taking on a liability by providing loyalty points for conversion. *See*, *e.g.*, Ex. 1004, \P [0157]; Ex. 1008, \P 73-74 and 85-95.

1. Antonucci Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein the Non-negotiable Credits And Entity Independent Funds Are Loyalty Points of Different Rewards Programs

Antonucci relates to "facilitating the substantially real-time transfer of loyalty points between accounts. The method and system include receiving a transfer request (e.g., consumer request, triggering event, etc.) for a transfer of a certain number of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist, analyzing the type/level of consumer and type/level of points to be involved in the transfer, deducting the requested loyalty points from the transferor account, determining if any rules exist for restricting or limiting the transfer of points, using a conversion engine to convert the point value to an appropriate point value in the transferee account and increasing the point balance in the transferee account." Ex. 1004 at Abstract. Thus, Antonucci discloses a system which allows a user to convert loyalty points of a first loyalty program to loyalty points of a second loyalty program. *Id.* and Ex. 1008, ¶¶ 73-74 and 85-95.

2. Antonucci Discloses Converting Non-negotiable Credits to Entity Independent Funds Based on Credits-To-Fund Ratio

Antonucci discloses "determining if any rules exist for restricting or limiting the transfer of points, using a conversion engine to convert the point value to an appropriate point value in the transferee account, deducting the requested loyalty points from the transferor account, and increasing the point balance in the transferee account." Ex. 1004, ¶ [0153] (emphases added). The rules are implemented by an online central rewards mechanism that "may include, for example, product or service information, prices, availability of the product or service, shipping information, reward points information, available awards, information regarding points ratios and points redemption, and/or the like." *Id.*, ¶ [0098]. For example, *Antonucci* discloses converting Hilton Reward points to United Airlines based on a 5:1 ratio. *Id.*, ¶ [0157]; Ex. 1008, ¶¶ 73-74 and 87.

3. Antonucci Discloses a Commerce Partner That Does Not Accept Non-negotiable Credits Prior to Conversion, And Accepts The Entity Independent Funds to Provide Goods And Services After The Conversion

Antonucci discloses a system that includes a conversion engine used to, for example, "transfer five hundred Hilton Reward points to a United Airlines frequent flyer [miles]." Ex. 1004, ¶ [0157]. Once the Hilton Rewards points are converted to United Airlines frequent flyer miles, the frequent flier miles can be used to purchase an airline ticket from United Airlines. *Id.*, ¶ [0151]. Antonucci offers the

conversion engine because without the conversion loyalty points of one entity (e.g., Hilton) are not accepted by another entity (e.g., United) for a sale of goods or services (e.g., United Airline ticket); Ex. 1008, ¶¶ 73-74 and 88.

4. Antonucci Inherently Discloses Converting Non-negotiable Credits to Entity Independent Funds, Wherein The Commerce Partner is Compensated for Providing The Entity Independent Funds to the Consumer

"A prior art reference may anticipate without disclosing a feature of the claimed invention if that missing characteristic is necessarily present, or inherent, in the single anticipating reference." Schering Corp. v. Geneva Pharms., Inc., 339 F.3d 1373, 1377 (Fed. Cir. 2003). "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established." See MPEP § 2112.01 (citing to In re Best, 562 F.2d 1252, 1255 (C.C.P.A. 1977)). "[W]hen the PTO shows sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709 (Fed. Cir. 1990). Therefore, Patent Owner must rebut the prima facie case by showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255.

While *Antonucci* does not explicitly state compensating a commerce partner for providing entity independent funds as part of a conversion, one of ordinary skill

in the art would understand that compensating a commerce partner is necessarily present in Antonucci. Ex. 1008, ¶¶ 89-94. For example, Antonucci discloses allowing a consumer to convert "five hundred Hilton Reward points to a United Airlines frequent flyer account." Ex. 1004, ¶ [0157]; Ex. 1008, ¶¶ 89-94. One of ordinary skill in the art would understand that loyalty points are a liability for the entity administrating the loyalty program. Ex. 1005, ¶ [0062] ("withdrawal of points from that LP's account represent a real reduction in liability . . . the deposit of points into an LP's account represents an increase in the liability"); (Ex. 1008, ¶¶ 89-94). Anotnucci further discloses that the conversion engine "deduct[s] the requested loyalty points from the transferor account, and increase[es] the point balance in the transferee account." Ex. 1004, ¶ at [0153]. Thus, by increasing the balance of frequent flyer miles after conversion from Hilton Reward points, United Airlines is necessarily increasing its liability and Hilton is necessarily decreasing its liability. Ex. 1004, ¶ [0157]; Ex. 1008, ¶¶ 89-94. In order to be willing to take on increased liability, United would necessarily require to be provided some form of compensation to account for the increased liability resulting from the deposit of points. Ex. 1004, ¶ [0157]; Ex. 1008, ¶¶ 89-94; Ex. 1005, ¶ [0062]. Moreover, Hilton would be willing to provide compensation in view of a decreased liability due to the deduction of Hilton Reward. Id.

Thus, one or ordinary skill in the art would understand that by disclosing a conversion between Hilton reward points and United Airlines frequent flyer miles, *Antonucci* necessarily discloses providing compensation to a commerce partner for taking on additional liability by providing entity independent funds. Ex. 1008, ¶¶ 89-94.

5. Claim Chart For Claims 31-34, 36-42, And 44-46 And Antonucci

A claim chart disclosing each and every element of claims 31-34, 36-42, and 44-46 in *Antonucci* is included below. Ex. 1008, ¶ 95.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
[31 A]	"For example, if a consumer desires to transfer five hundred Hilton Reward points to a United Airlines
A method comprising: a commerce partner agreeing to accept transfers or conversions of quantities of non-negotiable credits to entity independent funds,	frequent flyer account, the conversion engine may determine that the five hundred Hilton Rewards points only translate into one hundred United Airlines frequent flyer points. As such, the system would only increase the United Airlines frequent flyer account by one hundred points." Ex. 1004, ¶ [0157]; see also Ex. 1004, Abstract; Ex. 1008, ¶¶ 73-74 and 85-95.
[31 B]	Rules implemented by an online central rewards
in accordance with a credits-to-funds ratio	mechanism "may include, for example, product or service information, prices, availability of the product or service, shipping information, reward points information, available awards, information regarding points ratios and points redemption, and/or the like." Ex. 1004, ¶ [0098] (emphases added). For example, <i>Antonucci</i> discloses converting Hilton Reward points to United Airlines based on a 5:1 ratio. <i>Id.</i> , ¶ [0157]; Ex. 1008, ¶ 87.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
[31 C] wherein the non-negotiable credits have been earned as part of a rewards program of an entity,	"In one exemplary embodiment, the central rewards mechanism 102 stores and informs a consumer of the reward points that have been earned by a particular transaction as well as accumulated over time." Ex. 1004, ¶ [0081]; see also Id., ¶ [0071] and [0157]; and Ex. 1008, ¶¶ 73-74 and 85-95.
wherein the commerce partner accepts the entity independent funds for goods or services that the commerce partner provides, wherein in absence of the non-negotiable credits being converted or transferred into the entity independent funds the commerce partner does not accept the non-negotiable credits for the goods or services that the commerce partner provides,	"If a consumer desires to transfer five hundred Hilton Reward points to a United Airlines frequent flyer account." Ex. 1004, ¶ [0157]. Once the Hilton Rewards points are converted to United Airlines frequent flyer miles, the frequent flier miles can be used to purchase an airline ticket from United Airlines. <i>Id.</i> , ¶ [0151].
[31 E] wherein the entity- independent funds are loyalty points of a loyalty program of the commerce partner;	"For example, Hilton Reward points may be transferred to a United Airlines frequent flyer account." Ex. 1004, ¶ [0157]; Ex. 1008, ¶¶ 73-74 and 85-95.
at least one of one or more computers detecting a communication over a network to grant a consumer a quantity of the entity independent funds,	"In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of a any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist, analyzing the type/level of consumer and type/level of points to be

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
	involved in the transfer, determining if any rules exist for restricting or limiting the transfer of points, using a conversion engine to convert the point value to an appropriate point value in the transferee account, deducting the requested loyalty points from the transferor account, and increasing the point balance in the transferee account." Ex. 1004, ¶ [0153] (emphases added); <i>see also Id.</i> , ¶¶ [0027], [0031], and [0158]; Ex. 1008, ¶¶ 73-74 and 85-95.
wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of the nonnegotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio,	"The amount of points to transfer may include a set amount of points, all of the points, any subset of point, an increasing amount of points, a decreasing amount of points and/or an amount of points based upon a certain formula, event or movement (e.g., transfer 500 points away from a consumer loyalty account for each month the consumer does not rent a car from a particular rental company)." Ex. 1004, ¶ [0160] (emphases added); see also Id., ¶ [0157] (disclosing a 5:1 conversion ratio); Ex. 1008, ¶¶ 73-74 and 85-95.
[31 H] wherein the subset of the non-negotiable credits are expended as part of the conversion or transfer,	"While the invention will be discussed in terms of a general transfer of loyalty points, one skilled in the art will appreciate that the transfer may include a deduction from a first account and a crediting of a second account." Ex. 1004, ¶ [0152]; Ex. 1008, ¶¶ 73-74 and 85-95.
[31 I] and wherein the commerce partner is compensated for providing the entity independent funds to the consumer;	The commerce partner is compensated for providing the entity independent funds to the consumer. Ex. 1008, ¶¶ 89-94.; see supra § VII.C.4. "For example, if a consumer desires to transfer five hundred Hilton Reward points to a United Airlines frequent flyer account, the conversion engine may determine that the five hundred Hilton Rewards

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
	points only translate into one hundred United Airlines frequent flyer points. As such, the system would only increase the United Airlines frequent flyer account by one hundred points." Ex. 1004, ¶ [0157]; see also Id. at Abstract. Conversion engine "deduct[s] the requested loyalty points from the transferor account, and increase[es] the point balance in the transferee account." Ex. 1004, ¶ [0153].
[31 J] responsive to the communication, at least one of one or more computers granting the consumer the quantity of the entity independent funds; and	"In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist using a conversion engine to convert the point value to an appropriate point value in the transferee account, deducting the requested loyalty points from the transferor account, and increasing the point balance in the transferee account ." Ex. 1004, ¶ [0153] (emphases added); <i>see also Id.</i> , ¶¶ [0027], [0031], and [0158]; Ex. 1008, ¶¶ 73-74 and 85-95.
[31 K] the at least one of the one or more computers accepting at least a portion of the quantity	"If a consumer desires to transfer five hundred Hilton Reward points to a United Airlines frequent flyer account," the United miles can be used to purchase an airline ticke. Ex. 1004, ¶ [0157].
of entity independent funds in exchange for the goods or services that the commerce partner provides, wherein the one or more computers do not accept the non-negotiable	This system can be implemented with "any hardware and/or software discussed herein or known in the art." Ex. 1004, ¶ [0153]; see also Id., ¶¶ [0027], [0031], [0158] and Fig. 3; Ex. 1008, ¶¶ 73-74 and 85-95.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
credits of the entity's rewards program for the goods or services in absence of the conversion or transfer.	
[32] The method of claim 31, wherein the granting of the quantity of entity independent funds comprises: at least one of the one or more computers accessing a loyalty program account for the loyalty program that the commerce partner maintains for the consumer; and at least one of the one or more computers adding the quantity of entity independent funds, referred to as loyalty points, to an existing quantity of loyalty points for the consumer, wherein records for the loyalty program account are maintained by the one or more computers within one or more non-transitory storage mediums.	"In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of a any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist, analyzing the type/level of consumer and type/level of points to be involved in the transfer, determining if any rules exist for restricting or limiting the transfer of points, using a conversion engine to convert the point value to an appropriate point value in the transferee account, deducting the requested loyalty points from the transferor account, and increasing the point balance in the transferee account." Ex. 1004, ¶ [0153] (emphases added); see also Fig. 3. showing "Retailer" 104 including "Rewards Terminal 108, Rewards Server 120 and databases 111 and 121; Ex. 1008, ¶¶ 73-74 and 85-95.
[33] The method of claim 32, further comprising: at least one of the one or more computers completing a sale of the goods or services, where the consumer expends at least the portion of the quantity of entity independent	"In the course of managing the LP, points are added to the customer's account typically when the customer purchases some goods or services, or are withdrawn when the customer redeems its points for some reward." Ex. 1004, ¶ [0057]. Computers in Retailers 104 manage different loyalty programs. <i>Id.</i> at Fig. 3; Ex. 1008, ¶¶ 73-74 and 85-

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
funds in exchange for the goods or services that the commerce partner provides. [34] The method of claim 31, further comprising: at least one of the one or more computers transferring or converting the subset of the non-negotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio.	"The amount of points to transfer may include a set amount of points, all of the points, any subset of point, an increasing amount of points, a decreasing amount of points and/or an amount of points based upon a certain formula, event or movement (e.g., transfer 500 points away from a consumer loyalty account for each month the consumer does not rent a car from a particular rental company)." Ex. 1004, ¶ [0160] (emphases added); see also Id., ¶ [0157] (disclosing a 5:1 conversion ratio); Ex. 1008, ¶¶ 73-74 and 85-95.
[36] The method of claim 31, wherein a single one of the one or more computers detects the communication, grants the consumer the quantity of entity independent funds, and accepts the portion of the quantity of entity independent funds.	"In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of a any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist." Ex. 1004, ¶ [0153] (emphases added); <i>see also Id.</i> , ¶ [0027] and Fig. 3 (single Retailer Terminal 108 in Retailer 104); Ex. 1008, ¶¶ 73-74 and 85-95.
[37] The method of claim 31, wherein a plurality of different ones of the one or more computers detects the communication, grants the consumer the quantity of entity independent funds, and accepts the portion of the quantity of entity independent funds.	"In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of a any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist." Ex. 1004, ¶ [0153] (emphases added); <i>see also Id.</i> , ¶ [0027] and Fig. 4 (multiple Retailer Terminals 108 in Retailer 104); Ex. 1008, ¶¶ 73-74 and 85-95.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
[38] The method of claim 31, wherein the one or more computers are owned by or operated for the commerce partner. [39A] A computer program product comprising: one or more nontransitory computer-readable mediums;	"retailer system 104 comprises a retailer terminal 108 and a retailer processor 110 in communication with database 111." Ex. 1004, ¶ [0082]; see also Figs. 3 and 4; Ex. 1008, ¶¶ 73-74 and 85-95. "In one embodiment, the system includes any hardware and/or software discussed herein or known in the art suitably configured for receiving a transfer request (e.g., consumer request, triggering event, etc) for a transfer of a any portion of loyalty points, accessing and analyzing the total number of loyalty points in the transferor account to determine if a sufficient number of points exist." Ex. 1004, ¶ [0153] (emphases added); see also Id., ¶ [0027] and Fig. 4; Ex. 1008, ¶¶ 73-74 and 85-95.
[39B] program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to detect a communication over a network to grant a consumer a quantity of entity independent funds, wherein the quantity of entity independent funds results from a conversion or transfer of at least a subset of nonnegotiable credits into the quantity of entity independent funds in accordance with a credit-to-funds ratio, wherein the subset of the nonnegotiable credits are expended as part of the conversion or transfer, and wherein the commerce partner is compensated for providing	See, e.g. supra discussion/citations for claim elements [31A]-[31I] in this chart; see also Figs. 6A-6I.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
the entity independent funds	
to the consumer, wherein the	
commerce partner agrees to	
accept transfers or	
conversions of quantities of	
the non-negotiable credits to	
entity independent funds in	
accordance with the credits-	
to-funds ratio, wherein the	
non-negotiable credits have	
been earned as part of a	
rewards program of the entity,	
wherein the commerce partner	
accepts the entity independent	
funds for goods or services	
that the commerce partner	
provides, wherein in absence	
of the non-negotiable credits	
being converted or transferred	
into the entity independent	
funds the commerce partner	
does not accept the non-	
negotiable credits for the	
goods or services that the	
commerce partner provides,	
wherein the entity-	
independent funds are loyalty	
points of a loyalty program of	
the commerce partner;	
[39C] one or more non-	See, e.g. supra discussion/citations for claim element
transitory computer-readable	[31J] in this chart; see also Fig. 2.
mediums; program	
instructions, stored on at least	
one of the one or more non-	
transitory computer-readable	
mediums, to, responsive to	
the communication, grant the	

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
consumer the quantity of the	
entity independent funds; and	
[39D] program instructions,	See, e.g. supra discussion/citations for claim element
stored on at least one of the	[31K] in this chart.
one or more non-transitory	
computer-readable mediums,	
to accept at least a portion of	
the quantity of entity	
independent funds in	
exchange for the goods or	
services that the commerce	
partner provides, wherein, per	
the program instructions, the	
non-negotiable credits are not	
accepted for the goods or	
services in absence of the	
conversion or transfer.	
[40] The computer program	See, e.g. supra discussion/citations for claim [32] in
product of claim 39, wherein	this chart; see also Fig. 2.
the program instructions to	
grant of the quantity of entity	
independent funds comprise:	
program instructions, stored	
on at least one of the one or	
more non-transitory	
computer-readable mediums,	
to access a loyalty program	
account for the loyalty	
program that the commerce	
partner maintains for the	
consumer; and program	
instructions, stored on at least	
one of the one or more non-	
transitory computer-readable	
mediums, to add the quantity	
of entity independent funds,	
referred to as loyalty points,	
to an existing quantity of	

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
loyalty points for the consumer, wherein records for the loyalty program account are maintained by the one or more computers within one or more non-transitory storage mediums. [41] The computer program product of claim 39, further comprising: program instructions, stored on at least one of the one or more non-transitory computer-readable mediums, to complete a sale of the goods or services, where the consumer expends at least the portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides.	See, e.g. supra discussion/citations for claim [33] in this chart.
[42] The computer program product of claim 39, further comprising: program instructions, stored on at least one of the one or more nontransitory computer-readable mediums, to transfer or convert the subset of the nonnegotiable credits into the quantity of entity independent funds in accordance with the credit-to-funds ratio. [44] The computer program product of claim 39, wherein a single computer executes	See, e.g. supra discussion/citations for claim [34] in this chart. See, e.g. supra discussion/citations for claim [36] in this chart.

Claims of the '023 Patent	Exemplary Disclosure of Antonucci
detect the communication, the	
program instructions to grant	
the consumer the quantity of	
entity independent funds, and	
the program instructions to	
accept the portion of the	
quantity of entity independent	
funds.	6 1 5057
[45] The computer program	See, e.g. supra discussion/citations for claim [37] in
product of claim 39, wherein	this chart.
a plurality of different	
computers communicating	
with each other execute the	
program instructions to detect	
the communication, the	
program instructions to grant	
the consumer the quantity of entity independent funds, and	
the program instructions to	
accept the portion of the	
quantity of entity independent	
funds.	
[46] The computer program	See, e.g. supra discussion/citations for claim [38] in
product of claim 39, wherein	this chart.
the one or more computers	
upon which the program	
instructions are loaded and	
executed are owned by or	
operated for the commerce	
partner.	

D. Ground No. 4: Claims 31-34, 36-42, And 44-46 Are Invalid Under 35 U.S.C. § 103 as Being Obvious Over *Antonucci et al.* In View of *MacLean et al.*

Both *Antonucci* and *MacLean* qualify as prior art under pre-AIA 102(b). *See Supra* §§ VII.B and VII.C. Further, *Antonucci* discloses each recitation of claims

31-34, 36-42, and 44-46 of the '023 Patent except for explicitly disclosing "wherein the commerce partner is compensated for providing the entity independent funds to the consumer," as recited in claim 31 and similar recitation in claim 39. *See Supra* § VII.C (Petitioners respectfully incorporate the claim chart of *Antonucci* included in §VII.C to §VII.D to support this obviousness rejection). To the extent that the Patent Trial and Appeal Board determines that such a recitation is not inherent in *Antonucci*, claims 31-34, 36-42, and 44-46 of the '023 Patent are unpatentable over *Antonucci* in combination with *MacLean*.

While *Antonucci* does not explicitly disclose compensating a commerce partner, *MacLean* discloses compensating loyalty program administrators partner so that they are "willing to be paid to deposit points in their accounts." Ex. 1005, ¶ [0062]; *supra* § VII.B.4. For example, in *MacLean* "transaction center 902 levies in step 912 a transaction fee in the amount of \$8 that was set as a percentage of the cost of the withdrawal, leaving \$72 available to buy points from the second issuer 901." Ex. 1005, ¶ [0064]. Thus, *MacLean* explicitly discloses providing \$72 to second issuer 901 for providing its loyalty points. *See Supra* § VII.B.4.

Moreover, the combination of *Antonucci* and *MacLean* would have been obvious at least because *MacLean* is in the same field of endeavor as *Antonucci*, *i.e.*, providing a system for converting and/or transferring loyalty points. Ex. 1005 (Abstract); Ex. 1004 (Abstract); Ex. 1008, ¶¶ 104-107. Indeed, both *MacLean* and

Anotherical purport to increase the flexibility for consumers of loyalty programs by offering a system to exchange such points. *Id.* Moreover, compensating loyalty program administrators who are willing to increase their liability by offering points would have been predictable and would have not resulted in any unexpected results. Ex. 1008, ¶¶ 104-107. This is at least because without receiving compensation a particular loyalty program administrator would be unwilling to increase its liability by offering points for a conversion and/or exchange. Ex. 1008, ¶¶ 104-107. Thus, because compensating the commerce partner was well-known, predictable, and provided motivation to encourage participation in the conversion by accounting for the additional liability, it would have been obvious to a person of ordinary skill in the art at the time of the invention to add this feature. Ex. 1008, ¶¶ 104-107.

Accordingly, claims 31-34, 36-42, and 44-46 of the '023 Patent are also unpatentable over *Antonucci* in combination with *MacLean*.

E. <u>Ground No. 5:</u> Claims 31-34, 36-42, and 44-46 Are Invalid Under 35 U.S.C. §112(a), (Known as 112, First Paragraph Prior to AIA)

Written description requires either express or inherent disclosure of every claimed feature; it is insufficient to claim an obvious variation of disclosed subject matter. To satisfy the written description requirement, the specification of a patent must reasonably convey to those of skill in the art that, as of the filing date, the inventor had possession of the claimed subject matter. *Ariad Pharms., Inc. v. Eli*

Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). "One shows that one is 'in possession' of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious." Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1571 (Fed. Cir. 1997). "While the meaning of terms, phrases, or diagrams in a disclosure is to be explained or interpreted from the vantage point of one skilled in the art, all the limitations must appear in the specification. The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification." PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1306 (Fed. Cir. 2008).

1. The '023 Patent Specification Fails to Describe Converting Non-Negotiable Credits Into Entity Independent Funds "Wherein the Entity Independent Funds are Loyalty Points of a Loyalty Program of the Commerce Partner"

The specification of the '023 Patent lacks any disclosure that would have indicated to one of ordinary skill in the art that the patentee possessed converting non-negotiable credits into entity independent funds "wherein the entity independent funds are loyalty points of a loyalty program of a commerce partner," as recited by independent claim 31 with similar recitation in independent claim 39. Ex. 1001 at 9:60-10:6 and 11:5-28; Ex. 1008, ¶¶ 114-123. Accordingly, claims 31 and 39, and their dependent claims 32-34, 36-38, 40-42, and 44-46 are invalid under § 112, first paragraph as lacking written description support.

Independent claims 31 and 39 expressly require a conversion of non-negotiable funds to a currency that is specific to a particular entity, *i.e.*, the currency is independent funds, "wherein the entity independent funds are loyalty points of a loyalty program of the commerce partner." There is no disclosure in the '023 Patent of a "commerce partner" or a loyalty program of the commerce partner. Ex. 1008, ¶¶ 114-123. The only conversion actually disclosed in the '023 Patent, is the conversion of loyalty points into a negotiable fund. Ex. 1001, 4:23-25; Ex. 1008, ¶¶ 114-123. The '023 Patent specifically describes "non-negotiable credits" to be "frequent flier miles, consumer loyalty points, and entertainment credits." Ex. 1001 at 1:20-24. Yet, the specification repeatedly discloses "entity independent funds" as monetary currency. Ex. 1001 at 2:43-54, 4:23-25, 5:1-13, Fig. 2 and Fig. 3; Ex. 1008, ¶¶ 114-123.

Further, the specification characterizes "non-negotiable credits" as inflexible because of (1) "the restriction on usage to goods and/or services of the entity"; (2) "redemption delay" such that "the consumer must wait for the entity to perform one ore more actions;" (3) "expir[ing] before a sufficient quantity is acquired;" and (4) "consumers often belong[ing] to multiple credit-earning programs that provide the consumers with multiple incompatible forms of non-negotiable credit." Ex. 1001 at 1:33-65; Ex. 1008, ¶ 118. The specification further explains that "different programs, values, and rules can understandably confuse and frustrate consumers,

who due to their confusion, often elect to avoid participating in an entity sponsored credit program." Ex. 1001 at 2:7-11. To overcome this rigidity of "non-negotiable credits" of a loyalty program that could not be negotiated for good or services from anyone other than the entity administering the loyalty program, the inventor of the '023 Patent purported to invent a system that allowed consumers to convert these "non-negotiable credits" to "entity independent funds," *i.e.*, monetary currency that is independent of any entity and can be used to purchase goods or services from any entity not just a commerce partner. *See, e.g.*, Ex. 1001 at 2:43-54, 4:23-25; Ex. 1008, ¶¶ 114-123.

Yet, independent claims 31 and 39 require a consumer to convert his/her non-negotiable loyalty points to currency of a commerce partner such that the consumer will face the same inflexibilities that are described in the '023 Patent as causing consumers to be "confuse[d] and frustrate[d]." Ex. 1001 at 2:7-11. Thus, the limitations of converting from loyalty points to currency of a commerce partner (loyalty points of a different program) do not appear in the specification of the '023 Patent and one of ordinary skill in the art would have recognized that the specification failed to convey possession of such a conversion. Ex. 1008, ¶¶ 114-123.

2. The '023 Patent Specification Fails to Describe "Wherein the Commerce Partner is Compensated For Providing the Entity Independent Funds"

The specification of the '023 Patent lacks any disclosure that would have indicated to one of ordinary skill in the art that the patentee possessed converting non-negotiable credits into entity independent funds "wherein the commerce partner is compensated for providing the entity independent funds," as recited by independent claim 31 with similar recitation in independent claim 39. Ex. 1001, 9:60-10:6 and 11:5-28; Ex. 1008, ¶¶ 124-132. Accordingly, claims 31 and 39, and their dependent claims 32-34, 36-38, 40-42, and 44-46 are invalid under § 112, first paragraph as lacking written description support.

There is no written description in the specification of a "commerce partner" and/or a commerce partner being compensated for providing entity independent funds for a conversion. *Supra* at § VII.E.1; Ex. 1008, ¶¶ 114-123. The only disclosure of a "commerce partner" is in the Abstract of the Patent, which was added as new subject matter on June 25, 2012, when the application that led to the '023 Patent was filed. Ex. 1009, As-Filed Application. The newly added Abstract, however, still does not provide the required disclosure of a "commerce partner" being compensated. Accordingly, claims 31-34, 36-42, and 44-46 are invalid under § 112, first paragraph as lacking written description.

3. The <u>Abstract</u> of the '023 Patent Does Not Provide Sufficient Written Description For Converting Non-Negotiable

Credits Into Entity Independent Funds "Wherein the Entity Independent Funds are Loyalty Points of a Loyalty Program of the Commerce Partner" and "Wherein the Commerce Partner is Compensated For Providing the Entity Independent Funds"

Having no description of these recitations, the '023 Patent is invalid under 112. Any effort from Loyalty Conversion to save the patent because the Abstract of the '023 Patent identifies the "commerce partner receiv[ing] at least a portion of the compensation" is not sufficient because "[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *See, e.g.*, MPEP § 2163 (citing *Moba*, *B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319 (Fed. Cir. 2003)). "However, a showing of possession alone does not cure the lack of a written description." MPEP § 2163 (citing *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 969-70 (Fed. Cir. 2002)).

The Abstract of the '023 Patent states:

Restrictions on use prevent the non-negotiable credits from being directly applied for a purchase of at least one goods or services of a **commerce partner**, which is an independent entity from the entity. A quantity of the non-negotiable credits are subtracted in response to the purchase of the goods or services that cost a quantity of entity independent funds, which result from a conversion

of the subtracted quantity of non-negotiable credits into the entity independent funds in accordance with a credit to fund conversion ratio. The entity provides compensation for the subtracted quantity of the non-negotiable credits. The **commerce partner receives at least a portion of the compensation**.

Ex. 1001, Abstract.

The Abstract of the '023 Patent merely mentions a commerce partner in the context of providing goods or services and in the context of receiving a portion of compensation for subtracted non-negotiable credits. No where in the Abstract is there any disclosure of a conversion from the currency of loyalty point of an entity to the currency of loyalty point of a commerce partner as required by claims 31 and 39. Ex. 1008, ¶¶ 126-131. Similarly, there is no disclosure of the commerce partner receiving compensation <u>for providing the entity independent funds</u> as also required by claims 31 and 39. Ex. 1008, ¶¶ 126-131.

Such a cursory statement does not clearly convey that the inventor invented a system that allowed the claimed conversion. *See In re Barker*, 559 F.2d 588, 592 n.4 (C.C.P.A. 1977) ("[T]he 'essential goal' of the description of the invention requirement is to clearly convey the information that an applicant has invented the subject matter which is claimed.") Moreover, such a cursory statement does not meet "implement[] the principle that a patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's

obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed." *See, e.g.*, MPEP § 2163 (citing *Capon v. Eshhar*, 418 F.3d 1349, 1357 (Fed. Cir. 2005)). Thus, the Abstract of the '023 Patent does not provide sufficient written description and claims 31-34, 36-42, and 44-46 of the '023 Patent are invalid under § 112, first paragraph as lacking written description. Ex. 1008, ¶¶ 126-131.

VIII. CONCLUSION

With this Petition, Petitioners have established a reasonable likelihood that claims 31-34, 36-42, and 44-46 of the '023 Patent are invalid under at least one or more of 35 U.S.C. §§ 101, 112, 102, and 103. Petitioners therefore respectfully request that a post-grant review of these claims be instituted, and that claims 31-34, 36-42, and 44-46 be held unpatentable.

The required fees in the amount of \$30,000.00 were submitted on March 17, 2014. If there are any additional fees due in connection with the filing of this paper, please charge the required fees to our Deposit Account No. 130019.

Respectfully submitted, Date: April 4, 2014

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CERTIFICATE OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that the above-captioned "Corrected Petition for Covered Business Method Patent Review of U.S. Patent No. 8,313,023 Under 35 U.S.C. § 321 and § 18 of the Leahy-Smith America Invents Act," including its supporting evidence (**CORRECTED EXHIBITS 1001-1016**), was served in its entirety on April 4, 2014, upon the attorneys of record for the patent at the following addresses via USPS Express Mail:

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ADDITIONAL SERVICE INFORMATION

Further, the undersigned hereby certifies that a courtesy copy the above-captioned "Corrected Petition for Covered Business Method Patent Review of U.S. Patent No. 8,313,023 Under 35 U.S.C. § 321 and § 18 of the Leahy-Smith America Invents Act," including its supporting evidence (**CORRECTED EXHIBITS**1001-1016), was served in its entirety on April 4, 2014, upon the attorneys of record in related matters in Eastern District of Texas at the following email addresses via Electronic Mail:

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